

FACTOR SHEETS – AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONDITIONS

The Environmental Matrix of the Basic Sheets lists specific environmental factors or issues that were investigated for this Environmental Impact Statement. There are individual Factor Sheets that correspond with specific environmental factors identified on the Matrix. The Factor Sheets are used to provide detailed information on environmental factors and issues that may be substantial and that require a more in-depth discussion than is possible to provide in the comments portion of the Evaluation Matrix on page 61.

If there is no substantial impact to a specific environmental factor, a Factor Sheet was not completed, rather described in the comment section of the Environmental Matrix.

Calculations of the potential impacts were based on a study corridor width of 400 feet for the 4-lane alternatives, 200 feet for Alternative 3, which would remain a two-lane highway and the proposed right-of-way width on existing US 14 for portions of Alternative 2b that are within the urban area of Fort Atkinson. This is so that each alternative is compared fairly and to determine the maximum impacts that could occur. It is highly likely that for impacted areas, minimization would actually occur as roadway design is refined on a selected alternative.

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A. SOCIO-ECONOMIC FACTORS

1. General Economics Impact Evaluation Factor Sheet

1) Describe, briefly, the existing economic characteristics of the area around the project. This could include type(s) of farming, retail or wholesale businesses, manufacturing, tourism, or other elements contributing to the area's economy and potentially affected by the project.

Economic data show that the study area has a healthy and growing economy, which will ultimately translate into increased demands on the transportation system. Elements contributing to the area's economy are farming in the rural areas and retail, wholesale and manufacturing businesses existing primarily within the City of Fort Atkinson. Tourism also contributes to the area's economy.

Economic data are presented in Purpose and Need on page 20.

2) Discuss the economic advantages and disadvantages of the proposed action. Indicate how the project would affect the characteristics described in item 1 above.

No Action and Alternative 1a

Advantages

Traffic would continue to flow through the downtown, giving exposure to downtown businesses.

The City of Fort Atkinson would continue to receive state aids for maintenance of a state trunk highway.

The lack of new construction cost to the State compares favorably against the build alternatives.

For Alternative 1a, improved geometrics would improve safety and so reduce the potential for crashes. A reduction in crashes would reduce associated economic impacts due to loss of life, injuries and property damage.

Disadvantages

Large semi-trucks and non-local traffic would continue to use Main Street. The local Chamber of Commerce has indicated that this type of traffic is not pedestrian friendly and may discourage shoppers from coming downtown.

Main Street Parking would be maintained as is. On-street parking would continue to be narrow at a typical 7 to 8 feet wide.

The City would not have the planned highway access to their business park on the south side of Fort Atkinson as they have planned.

As a Corridors 2020 connector highway and as part of the National Highway System, the roadway does not currently serve regional traffic effectively, including freight traffic that carries goods to markets. Freight haulers must slow down and negotiate their way through the City. This inefficiency has a negative impact on the general economics of the state since goods cannot be transported as easily as they can on a route with more constant speeds and fewer operational conflicts created in downtown Fort Atkinson.

Alternative 2b

Advantages

Traffic would continue to flow through the downtown, giving exposure to downtown businesses.

Main Street Parking could be preserved and automobile access to that parking could be improved. There is room under this alternative to allow parking lanes wider than the existing 7 to 8 feet.

The estimated project cost at \$29.8 million would be lower than the estimated project cost of a bypass on new alignment which ranges from \$45.1 to \$50.5 million.

Improved geometrics would improve safety and so reduce the potential for crashes. A reduction in crashes would reduce associated economic impacts due to loss of life, injuries and property damage.

Disadvantages

Large semi trucks and non-local traffic would continue to use Main Street. The local Chamber of Commerce has indicated that this type of traffic is not pedestrian friendly and may discourage shoppers from coming downtown.

Better traffic flow may increase speeding, which would impair the customer friendly atmosphere that the city seeks.

The one-way pair makes it difficult to travel to and from a specific location without having to drive into the residential neighborhoods. This is complicated by the presence of the Rock River which cuts across at a diagonal. This would create conflicts with residential neighborhoods by introducing additional detouring traffic. It could also discourage shoppers if it is difficult to get to a parking space at the front door of the establishment they want to visit.

The City would not have the planned highway access to their business park on the south side of Fort Atkinson.

Alternative 3**Advantages**

The cost to the state is less than building a bypass. This would not eliminate the need to upgrade the existing route because it would continue to be a state highway (WIS 89) and would need improvements if traffic reaches the projected volumes of 10,300 vehicles per day in 2030. The estimated project cost of Alternative 3 is \$23.9 million while the bypass alternatives range from \$45.1 to \$50.5 million.

Disadvantages

The traffic assessment indicates that Alternative 3 would be ineffective in terms of providing a direct and well utilized US Highway route. See Table 9 on page 46 and Figure 20 through Figure 24, beginning on page 47, showing the estimated traffic numbers and projections. Traffic would not be diverted from existing US 12 to CTH N as well as with Alternatives 7 and 7a. The traffic mix of regional and local traffic would continue in downtown Fort Atkinson and would potentially affect the City's economy as stated in City of Fort Atkinson Resolution. See Resolutions in Appendix F.

The City would not have the planned highway access to their business park on the south side of Fort Atkinson.

Alternative 7 and 7a**Advantages**

A bypass could positively impact employment opportunities in the city of Fort Atkinson by opening new areas for commercial or service-sector growth. This opportunity for development can be positive for a community if it is planned growth.

The City's industrial districts in the Robert L. Klement Business Park and along Janesville Avenue would be served by easy-on easy-off access to the US Highway System. This improved access could result in increased development potential and make it an attractive selling point to businesses looking to locate in the City's south side manufacturing district and eventually increase the local tax base. See Figure 9 on page 22 for a map of land uses and Figure 25 on page 98 for a map of the business park.

The Chamber of Commerce cited in a resolution that the Highway 26 bypass enhanced the customer friendly atmosphere of downtown. A reduction in heavy truck traffic and the overall reduction in traffic congestion downtown would likely be beneficial in increasing the desired customer friendly atmosphere. The city of Fort Atkinson states that this could further support the public/private investment in building renovation and river walk development in downtown Fort Atkinson.

Improved regional mobility would provide more efficient movements of goods through the region, reducing fuel consumption and travel times.

Improved geometrics would improve safety and so reduce the potential for crashes. A reduction in crashes would reduce associated economic impacts due to loss of life, injuries and property damage.

Disadvantages

A bypass could create new competition in the retail market because additional commercial development could be influenced to locate at the interchanges to take advantage of the drive-by traffic on the bypass. The City's Master Plan indicates a need for additional commercial development to serve projected population increases.

Tax revenues from taxable real property would be lost as the property is transferred from private to public ownership, thereby reducing the Town of Koshkonong tax base.

This route requires the most new construction of all the alternatives, and would remove the greatest acreage of farmland out of production.

A bypass may cause a reduction in property values for those areas that are less accessible such as farm buildings separated from cropped land.

At estimated project costs of \$50.5 million for Alternative 7 and \$45.1 million for Alternative 7a, these are the most expensive alternatives.

Residential property values of some homes could be negatively affected by noise and diminished aesthetics because of the proximity of the bypass to existing homes.

With Alternative 7, 8 farms would be severed and 6 farms would be severed with Alternative 7a. This would cause economic hardships to those individual farmers or corporations.

3) In general, will the proposed action increase or decrease the potential for economic development in the area influenced by the project.

Alternatives 1, 1a and 2b

In general, these alternatives could affect the potential for economic development in downtown Fort Atkinson as discussed in Question 2, above. The advantages and disadvantages include impacts related to traffic volumes and mix in the downtown business area. These alternatives do not eliminate trucks from the local streets, which would make traffic patterns safer for shopping pedestrians, thereby encouraging economic development downtown. These alternatives would not provide an increase in development potential for the Fort Atkinson business park that the bypass alternatives would because the business park would not have the easy access to a bypass as envisioned by the business park planners.

Alternative 3

In general, Alternative 3 would not have an effect on the potential to affect economic development much more than the no build alternative (Alternative 1) because it ineffectively diverts traffic. There are no indications that by simply re-signing the route as US 12, motorists and freight transporters would choose to use it over the existing route.

Alternatives 7 and 7a

A WisDOT research project of bypassed communities shows that bypasses in Wisconsin, of cities comparable in size to Fort Atkinson, do not have detrimental effects on economic development.¹⁸ That study found that over the long term, traffic on the old routes are close to or higher than pre-bypass counts, indicating continued economic activity in those communities. Another finding was that little retail flight has occurred in bypassed communities.

According to WisDOT research, other Wisconsin communities that have been bypassed view their bypasses as beneficial overall. Primarily, there is better overall traffic flow and congestion relief. The elimination of trucks and seasonal traffic from local streets made traffic patterns safer and more predictable in the community. Individual users benefit from improved travel times, transportation cost and increased safety. This can translate into economic savings to truckers by reducing their shipping costs. This can further translate into lower product costs and business expansion.¹⁹

In general, the City of Fort Atkinson could benefit from a bypass because of the improvements it would cause in easing the transportation of goods manufactured in the City's industrial districts. Eliminating truck traffic from the downtown area could make the central business district more attractive to pedestrians and shoppers, both locals and tourists.

¹⁸ *The Economic Impacts of Highway Bypasses on Communities*. Wisconsin Department of Transportation. February 1998.

¹⁹ Glen E. Weisbrod and James Beckwith (1992) *measuring Economic Development Benefits for Highway Decision-making: The Wisconsin Case* [online] Available from <http://www.edrgroup.com/pages/pdf/Wisconsin29.pdf> (accessed September 2004).

Another study suggests that “The wide range of highway bypass studies carried out around the country provide a generally consistent story. They indicate that highway bypasses are seldom either devastating or the savior of a community business district. The locational shift in traffic can cause some existing businesses to turn over or relocate, but net economic impacts on the broader community are usually relatively small (positive or negative). Communities and business districts that have a strong identity as a destination for visitors or for local shoppers (such as Stillwater) are the ones that are most likely to be strengthened due to the reduction in traffic delays through their centers. However, there is a broad perception that adequate signage to the bypassed business center is an important need (and concern) for ensuring its continued success.”²⁰

²⁰ Dennis Leong, Wisconsin Department of Transportation and Glen Weisbrod, Economic Development Research Group. (July 1999) *Summary of Highway Bypass Studies* [online] Available from <http://www.edrgroup.com/pages/pdf/Town-Bypass-Case-Studies.pdf> (accessed September 2004)

2. Community or Residential Impact Evaluation Factor Sheet

1) Give a brief description of the community or neighborhood affected by the proposed action.

COMMUNITY & NEIGHBORHOOD CHARACTERISTICS

Jefferson and Rock Counties are located in Southeast Wisconsin, between the cities of Milwaukee and Madison. The majority of land is dedicated to agricultural and open space uses. In the study area, the only incorporated city is the City of Fort Atkinson. The area is rich in historic and archaeological resources, as well as natural resources including high quality wetland complexes, forested woodlands and open agricultural cropland and dairy operations. The study area has manufacturing and commercial businesses, primarily within the City of Fort Atkinson. Fort Atkinson is considered a “manufacturing center” in the State’s highway plans.

After Watertown, Fort Atkinson is the second largest municipality in Jefferson County and is considered a “trade center” for the State of Wisconsin. See also the Economic Development and Business Impact Factor Sheet. The City is a typical Midwestern small city with a typical historic development pattern of a central business district surrounded by traditional residential neighborhoods interspersed with churches and schools. Newer development occurs as the city has grown outward, mainly toward the northwest and southwest. Many residential houses have been converted to commercial uses as the central business district pushes out along the US 12 corridor. Industrial development has been directed toward the southwest and west of the city as shown on their Master Plan. Land use designations are indicated on Figure 9 page 22.

The main groups that have expressed interest in the project include the rural residents from the Towns of Koshkonong, Lima and Milton and the urban residents from the City of Fort Atkinson. The Town of Koshkonong sustains both agricultural uses and low density (large lot) residential development. The agricultural uses are mainly family farming operations although there are some large dairy operations within the township, including Pond Dairy, LLC, which would be affected by Alternatives 7 and 7a. Rural residential development has been limited mainly to the extra-territorial area of the City of Fort Atkinson where there are numerous scattered ranchette-type residential uses. The Towns of Milton and Lima in Rock County, where Alternative 3 is located, are primarily agricultural areas, with some scattered rural residential uses, home occupations, hobby farms, and commercial uses. Agricultural uses include large and small dairy operations as well as open cropland.

DEMOGRAPHICS:

Table 12 through Table 17 present demographic data from the 2000 US Census and from the Wisconsin Department of Administration’s Demographic Service Center.

The Town of Koshkonong’s population being greater than the Rock County Towns shows that its proximity to an urban area (Fort Atkinson) influences their residential growth. The Town of Lima and Milton are more traditional farming communities that are not yet experiencing growth pressures from the municipalities that lie within them. Koshkonong has its rural areas, but it also has quite a bit of residential land use.

Table 12: Populations, Households and Families (number)

Community/neighborhood name	Community population	Households	Families
Fort Atkinson, Wisconsin	11,621	4,760	3,070
Town of Koshkonong, Wisconsin	3,395	1,249	965
Jefferson County, Wisconsin	74,021	28,205	19,894
Town of Milton	2,844	1,061	813
Town of Lima	1,312	472	367
Rock County, Wisconsin	152,307	58,617	40,403

Table 13 shows that the City of Fort Atkinson is aging compared to the rest of the study area. The Towns appear to have the highest number of those in their peak earning years from age 35 to 54.

Table 13: Populations by Age (percent)

Community/neighborhood name	0-17	18-24	25-34	35-44	45-54	55-64	65+
Fort Atkinson, Wisconsin	24.2	8.6	14.4	16.4	13.5	8.3	14.5
Town of Koshkonong, Wisconsin	25.3	6.5	9.8	18.0	18.1	11.3	11.1
Jefferson County, Wisconsin	25.2	8.5	13.6	16.8	14.1	9.2	12.6
Town of Milton	26.3	7.1	10.5	19.3	18.0	10.1	8.8
Town of Lima	25.9	7.3	11.7	18.1	15.3	10.4	11.2
Rock County, Wisconsin	26.5	8.6	13.5	16.3	13.6	8.8	12.7

Fort Atkinson does not have a large minority population, but it has a higher percentage of minorities than the surrounding townships.

Table 14 shows the census breakdown of minorities in each community.

Table 14: Populations by Race (number)

Community/neighborhood name	White Alone	Black Alone	American Indian Alone	Asian Alone	Pacific Islander Alone	Other Race Alone	Two or more races
Fort Atkinson	11,167	40	34	70	1	217	92
Town of Koshkonong	3,324	1	10	6	0	18	36
Jefferson County	71,309	210	249	333	14	1,220	686
Town of Milton	2,789	5	5	9	0	12	24
Town of Lima	1,212	7	3	0	4	60	26
Rock County	138,610	7,048	422	1,191	61	2,691	2,284

As shown in the following table, the median household income in 1999 of the various affected communities compare favorably with the State as a whole with the median income in Fort Atkinson being nearly the same as the State as a whole. The Towns of Lima and Milton had the highest income level in the study area.

Table 15: Median Household Income in 1999

Community/neighborhood name	Median Household Income in 1999 (Dollars)
Fort Atkinson	43,807
Town of Koshkonong	60,000
Jefferson County	46,901
Town of Milton	60,151
Town of Lima	48,913
Rock County	45,517
Wisconsin State	43,791

Cars are by far the preferred means of transportation to work as indicated in Table 16 on page 79. This is expected since the area is not metropolitan, where you would expect to see the use of public transportation. There is no city bus service or rail service in Fort Atkinson.

Table 17 on page 79 shows that Fort Atkinson and Koshkonong have the smallest commute, likely due to the close proximity to the major employers within Fort Atkinson. Lima and Milton have longer commutes; they are further removed from an urban area.

Table 16: Commuting – Means of Transportation to Work for Workers 16 Years and Over

	Jefferson County	Rock County	Town of Koshkonong	Town of Lima	Town of Milton	City of Fort Atkinson
Total	39,264	75,033	1,826	692	1,544	6,196
Car, truck, or van	35,809	69,953	1,731	616	1,414	5,727
Drove alone	31,679	62,385	1,520	495	1,260	5,092
Carpooled	4,130	7,568	211	121	154	635
Public transportation:	317	558	6	5	5	71
Bus or trolley bus	149	509	0	2	5	23
Streetcar or trolley car	5	0	0	0	0	3
Subway or elevated	0	0	0	0	0	0
Railroad	12	15	0	0	0	0
Ferryboat	0	6	0	0	0	0
Taxicab	151	28	6	3	0	45
Motorcycle	40	26	0	0	0	0
Bicycle	131	135	0	0	0	35
Walked	1,412	2,018	42	18	42	193
Other means	152	300	0	5	7	28
Worked at home	1,403	2,043	47	48	76	142

Source: 2000 US Census

Table 17: Travel Time to Work by Means of Transportation to Work for Workers 16 Years and Over Who Did Not Work at Home

	Jefferson County	Rock County	Town of Koshkonong	Town of Lima	Town of Milton	City of Fort Atkinson
Total:	37,861	72,990	1,779	644	1,468	6,054
Less than 30 minutes:	27,561	56,857	1,448	487	1,012	5,034
30 to 44 minutes:	5,779	9,233	136	110	240	533
45 to 59 minutes:	2,712	3,905	69	30	105	290
60 or more minutes:	1,809	2,995	126	17	111	197

Source: 2000 US Census

2) Identify and discuss the existing modes of transportation and their traffic within the community or neighborhood

Along US 12, the primary mode of transportation is personal vehicles (cars, motorcycles, small trucks) and commercial freight such as semi-trucks. School buses, taxis, bicycling and walking are other modes of transportation used. There is no mass transit operation in Fort Atkinson. The Jefferson County Glacial River Trail follows alongside WIS 26 west and southwest of Fort Atkinson. The City of Fort Atkinson has scheduled to construct a recreation/commuter bike trail in the City of Fort Atkinson on an abandoned Union Pacific Railroad corridor. This trail would have a connection to the Glacial River Trail.

US 12 traffic volumes in the Fort Atkinson area range from 9,000 vehicles per day (vpd) on Madison Avenue to 15,000 vpd along the Main Street Bridge. Details of the traffic volumes and traffic factors are contained in Table 9 on page 46.

3) Identify and discuss the probable changes resulting from the proposed action to the modes of transportation and their traffic within the community or neighborhood.

Alternative 1 and 1a Traffic projections show that traffic congestion would continue to increase as indicated in Figure 20 on page 47. Projected traffic volumes along US 12 in the Fort Atkinson area range from 11,500 vehicles per day on Whitewater Ave, south of CTH M to 21,200 vehicles per day along the Robert Street Bridge in the year 2030. Trucks make up between 3 and 9 percent of the average daily traffic. Truck traffic is further affected without the minimum 12 foot lane that is typically required on a long truck route. It results in difficulties in maneuvering and thus a reduction in operational capacity as traffic flow is interrupted while trucks take time to maneuver the turns.

Parallel parking in general results in a reduction in capacity on typical streets, especially during peak traffic times. In areas of high turnover, interruptions in traffic flow on adjacent lanes occur as parkers pull in and out of the parking spaces. This is especially a problem in Fort Atkinson on Main Street as the parking lanes are minimal at 7 to 8 feet in width.

Alternative 2b Alternative 2b would affect modes of transportation within the community in that traffic would be redirected as a one-way pair that is separated by three to four blocks, with the Rock River bisecting it generally from east to west. Circulation within the city would be changed as local traffic would need to make more maneuvers to get around downtown and so new traffic would be introduced into the adjacent neighborhoods. Projected traffic volumes along US 12 in the Fort Atkinson area range from 11,600 vehicles per day on Whitewater Ave, south of CTH M to 18,400 vehicles per day along the Robert Street Bridge in the year 2030.

Traffic would be more evenly distributed between Main Street and Robert Street whereas current conditions show a greater number of trips being carried by Robert Street than by Main Street (See Table 9 on page 46).

Alternative 3 See Figure 22 on page 49, which shows that average daily traffic numbers on CTH N would be minimally different from the No Action alternative (6,200 vs. 7,800 in the year 2030). There would be similar reductions on existing US 12 as shown in the figure.

Alternatives 7 and 7a As traffic congestion and traffic mix improves in downtown Fort Atkinson Chamber of Commerce officials are hopeful that the pedestrian and bicycle traffic would have the opportunity to increase as the perception of safety increases. Traffic downtown would decrease as shown in Figure 23 and Figure 24 on pages 50 - 51. These alternatives would introduce a new access controlled freeway into an area that currently does not have substantial amounts of traffic.

4) Briefly discuss the proposed action's effect(s) on existing and planned land use in the community or neighborhood.

See Appendix D for a Secondary and Cumulative Impacts Report that details potential changes to land use in the surrounding area.

Alternative 1, 1a, 2b

The City has planned and is developing their business park to have access to a future bypass and with these alternatives, their plans would not be realized.

Alternative 3

Alternative 3 is expected to have minimal secondary land use impacts. It is an existing route, no new interchanges are proposed and traffic is expected to increase from 6,200 ADT to 7,800 ADT. Existing land use is primarily agricultural and it is anticipated that it would continue to develop as it otherwise would, since the increase in traffic would not be great and since no interchanges are planned as a part of this project. Impact would occur to those residences and businesses adjacent to the highway when the right of way is widened.

Alternatives 7 and 7a

Alternative 7 would direct future growth and development to the southwest and as an indirect effect could encourage more rapid development and expansion of the industrial park because of the new access and rerouting of Business 26 through the business park on Commerce Parkway. The lands south of Fort Atkinson are planned for residential and industrial growth as indicated on the land use plans in Figure 9 on page 22. For Alternative 7, the lands converted to right of way would take away from the amount of land available for future residential growth. The local communities have indicated that it would be important to contain development north of any potential bypass to encourage compact and contiguous development. The urban service area extends outside of the boundary created by Alternative 7 and so development would likely jump the boundary created by the Alternative 7 alignment. Alternative 7a extends the boundary further south and so may stimulate residential development farther south. The Town's land use policies and decisions will have a greater impact on how far south land is developed with Alternative 7a. Industrial expansion is planned south of the Alternative 7 boundary and better fits the alignment of Alternative 7a. Both bypass alternatives will impact agricultural land uses by converting agricultural lands, severing farms and acquiring farm buildings. Secondary impacts to land use are discussed in more detail in the Secondary and Cumulative Impacts Report in Appendix D.

5) Address any changes to emergency services or other public services during and after construction of the proposed project.
Alternative 1

The response time would increase as the traffic and congestion increase. Traffic safety issues would continue to affect all vehicular traffic, including emergency service vehicles.

Alternative 1a

It is not expected that aside from slightly improving congestion, that the changes would significantly help a responding emergency vehicle.

Alternative 2b

Coordination with emergency services during construction would be minimal since this alternative would consist primarily of repainting lines on the roadways and resigning the route. Construction activities would need to be coordinated with emergency service providers to ensure the maintenance of access.

Response time could increase as emergency service routes would need to change due to the one-way pair and the resulting limited choices in travel routes to any given destination downtown.

Alternative 3, 7 and 7a

During construction, WisDOT would coordinate with emergency service providers to ensure access. Access would be maintained to rural properties. Service response time should decrease in some instances due to better traffic flow.

6) Describe any physical or access changes and their effects to lot frontages, driveways, or sidewalks. This could include effects on side slopes or driveways (steeper or flatter) reduced terraces, tree removal, vision corners, sidewalk removal, etc.
Alternative 1

No physical changes in access are proposed. As congestion increases, ease of entering the highway from driveways would degrade.

Table 18: Access Changes

Parcel Number	Site Addresses	Access Changes
Alternative 1a		
226-0514-0411-026 226-0514-0411-025 226-0514-0322-027 226-0514-0322-028 226-0514-0411-028	245 N. Main St. 225 N. Main St. 244 N. Main St. 310 N. Main St. 2 Madison Ave.	Properties at the intersection of Madison Avenue and North Main Street. Potential to implement access management and to possibly reduce driveways.
226-0514-1022-019	1012 Whitewater Ave.	East Rockwell & Whitewater Avenue access management and possibly reduce driveway access.
226-0514-0333-040	923 Whitewater Ave.	Realignment of Bark River Road & Rockwell to form a 4-leg intersection could potentially change access from Whitewater to Bark River Road.
Alternative 2b		
2331-000	N1086 US 12	Remove 2 access points on US 12 (Access provided on Carnes Rd.
1044-001	N1706 US 12	Remove 1 access point
1043-022	N1732 US 12	Consolidate 2 access points into 1
1031-005	N1857 US 12	Consolidate 2 access points into 1
1031-003	N1873 US 12	Consolidate 2 access points into 1
1031-001	N1895 US 12	Consolidate 2 access points into 1
1022-019	1012 Whitewater Ave	Consolidate 2 access points into 1
Alternative 3		
6-11-25 6-11-70 6-11-70.1 6-11-71.A 6-11-71.B 6-11-71.C 6-11-72.1 6-11-72.1A	11529 E CTH N No address (Jones) 11318 E CTH N 11142 E CTH N 11124 E CTH N 11142 E CTH N 11046 E CTH N 11045 E CTH N	2 existing APs– 1 proposed AP Consolidate 4 access points and install frontage road on the south side of CTH N to access all indicated properties with one access point on US 12.
6-11-62	10240 E CTH N	Consolidate 4 access points into 1
6-11-30.1 6-11-30.2 6-11-30.3	9805 E CTH N 9803 E CTH N 9817 E CTH N	Consolidate 3 access points into 1
6-11-65	10918 N CTH KK	Remove access point on CTH N (Access provided on CTH KK).
6-11-38	No address (Lauer)	Consolidate 3 access points into 1
6-11-46.2	8129 E CTH N	Remove 2 access points on US 12 (Access provided on Vickerman Road
6-11-48.2	8015 E CTH N	Consolidate 2 access points into 1
6-11-48.1 6-11-49A	7911 E CTH N 7819 E CTH N	Consolidate 2 access point into 1 using a frontage road
6-13-93.1 6-13-94.1 6-13-94.2A 6-13-94.2B	7327 E CTH N 7227 E CTH N 7237 E CTH N 7227 E CTH N	Consolidate 4 access points on US 12 into one backage road.
6-13-95.1	7119 E CTH N	Remove access point on US 12 (Access provided on Bryant Road
6-13-98	6936 CTH N	Consolidate 2 access points into 1
Alternative 7		
3613-000 3613-001 3624-001	N260 US 12 N273 US 12 N380 US 12	Provide frontage Road
3622-000	N 380 US 12	Cul-de-sac Buckingham and provide access via Buckingham
3623-000 3624-000 3623-001	No address (Winn) No address (Winn) N 416 US 12	Cul-de-sac Twinkling Star Road Affects Oak Clay Road Parcels and other Twinkling Star Parcels

Parcel Number	Site Addresses	Access Changes
3511-001	N 431 Twinkling Star Rd.	
3511-000 2644-000 Other Parcels on Hoge Road	N 491 US 12	Cul-de-sac Hoge Road. Provide a connection to Creamery Road between parcels 2634-000 and 2643-000
2641-000	N 640 US 12	Remove 1 farm access and provide access from Cheesebroro Road.
2331-000	N1086 US 12	Remove 2 access points on US 12 (Access provided on Carnes Rd.
Alternative 7a		
3613-000 3613-001 3624-001	N260 US 12 N273 US 12 N380 US 12	Provide frontage Road
3622-000	N 380 US 12	Cul-de-sac Buckingham and provide access via Buckingham
3623-000 3624-000 3623-001 3511-001	No address (Winn) No address (Winn) N 416 US 12 N 431 Twinkling Star Rd.	Cul-de-sac Twinkling Star Road Affects Oak Clay Road Parcels and other Twinkling Star Parcels
2742-000	W5850 Creamery Rd.	Consolidate 2 access points into 1
2821-000	N815 McIntyre Rd.	Consolidate 2 access points into 1

7) Indicate whether a community/neighborhood facility will be affected by the proposed action and indicate what effect(s) this will have, overall, on the community/neighborhood. Also include and identify any minority population or low-income population that may be affected by the proposed action.

Alternative 1 and 1a

In general, access to and from community/neighborhood facilities along the route are expected to be affected by increased traffic which can increase the difficulty of entering and leaving the sites. No minority or low-income populations are expected to be affected disproportionately by the proposed action.

Alternative 2b

For Alternative 2b, access to the Senior Center on Robert Street would change because Alternative 2b would eliminate access to the site for northbound traffic on Robert Street. Visitors would only be able to enter and exit the property from a southbound perspective with a right-turn. This elimination of the dual choice of turning movements may be safer because it would be easier to exit the site with the traffic coming from only one direction instead of two. This effect would be the same for Barrie Park on Robert Street.

There is a licensed Community Based Residential Facility (CBRF) located at N1366 US 12. Records indicate that the facility is licensed for up to 6 disabled individuals. Relocation assistance would be available for the facility as a business to assist them in relocating. The occupants would be considered separate tenant displacees depending on the nature of their disabilities and so they may need to be provided special services.

Alternatives 2b and 7

The Town of Koshkonong Town Hall is located within the study corridor of Alternatives 2b and 7 and may require relocation depending upon final design. The Town uses the Town Hall for administrative functions and as a community meeting-place. The Town would not be entitled to the replacement business assistance.

Alternatives 2b, 7 and 7a

Within the study corridor, five of fourteen owner-occupied mobile homes would need to be relocated from the Wolf mobile home park on Twinkling Star Road near the southern end of Alternatives 2b, 7 and 7a. This is likely a lower income neighborhood with some larger families where additional assistance may be needed to find replacement units.

Alternative 3

No public facilities would be directly affected by Alternative 3. Impacts noted above to the Town Hall, CBRF, and

mobile home park could be similarly affected with the upgrades to WIS 89 that would still be required to handle the future traffic projected for that route under the Alternative 3 scenario.

8) Place an "X" in the appropriate box below if one of the populations indicated would be *disproportionately* affected by the proposal. Give a brief description of the community/neighborhood and population affected by the proposed action. Include demographic characteristics of those affected by the proposal. For the populations shown below, The Orders issued by the U.S. Department of Transportation and its implementing agencies to satisfy the requirements of Executive Order 12898 require an evaluation to determine whether a minority and/or low income population would experience a disproportionately high and adverse effect. If any of the populations shown below are affected, the Environmental Justice Factor Sheet, along with the remaining items on this worksheet will need to be completed to satisfy Environmental Justice requirements

- a) ☒ NO Disabled population is not affected
☐ YES Disabled population is affected – See Environmental Justice Factor Sheet
- b) ☒ NO Elderly population is not affected
☐ YES Elderly are affected - See Environmental Justice Factor Sheet
- c) ☒ NO Minority populations are not affected
☐ YES Minority populations are affected - See Environmental Justice Factor Sheet
- d) ☒ No Low-income populations are not affected
☐ Yes Low income populations are affected - See Environmental Justice Factor Sheet

9) Identify and discuss, in general terms, factors that residents have indicated to be important or controversial.

Alternative 1 and 1a

Residents living along Robert Street and Whitewater Avenue have indicated problems with existing noise, speed, and difficulties getting out of their driveways because of traffic volume. Downtown, it is difficult for parked cars to open their doors on the driver's side.

Alternative 2b

Residents living along Robert Street and Whitewater Avenue have indicated existing noise, speed, and difficulties getting out of their driveways because of traffic speed and volume problems. Business access along Main Street is hindered because of traffic volume and narrow parking lane widths.

Alternative 3

Individuals from the towns of Milton and Lima have indicated concern about Alternative 3 because they feel it would negatively impact their quality of life in terms of noise, increased traffic, loss of farmland and loss of tax revenue to the town as land is taken off the tax rolls. Some felt it does not meet the purpose and need in that it is far away from the City of Fort Atkinson and so would be ineffective, while others felt that it would encourage too much traffic on CTH N, which would affect safety.

Residents of the town of Koshkonong have indicated that this route is practical, would save the state a lot of money and would eliminate the higher negative impacts of a bypass on new right of way on their township.

Alternative 7 and 7a

The town of Koshkonong has indicated concern that it would lose tax base through the conversion of private land to state right-of-way. In addition they cite a concern with the loss of productive farmland and impacts to dairy farms, as well as a concern for the loss of rural character.

The City of Fort Atkinson and the Fort Atkinson Industrial Development Corporation have cited concerns that without the Alternative 7 or 7a bypass, their business park development would be impacted. The infrastructure to the business park has been partially constructed including the roadways, which were designed to provide access to the park from the south. This southern access was planned to be from a bypass. See a map of the business park in Figure 25 on page 98.

10) Indicate the number and type of any residential buildings that would be removed because of the proposed action.

Table 19: Residential Impacts

Type of Occupied Residential Buildings to be Acquired	Alternative 2b	Alternative 3	Alternative 7	Alternative 7a
	Number of Occupied Buildings to be Acquired			
Single Family Dwellings	24	13	26	19
Apartment Buildings	1	0	0	0
Community Based Residential Facility	1	0	0	0
Condominiums	0	0	0	0
Duplexes	0	0	0	0
Mobile homes (in mobile home parks)	5	0	5	5
Mixed Use (Saxes Restaurant, Rural Insurance)	2	0	1	1

Alternate 2b, 7 & 7a

The single family dwelling located at N419 US 12, near southern end of route, is located on dairy farm operation.

Alternative 2b & 7

The single family dwelling located at N1086 US 12 at the southeast corner of US 12 and Carnes Road is located on a dairy farm operation.

Alternate 7a

The single family dwelling located at N1236 Groeler Road is located on a dairy farm operation. In this case all of the farm buildings may need to be acquired. This property is owned by Pond Hill Dairy, LLC and is part of their extensive dairy operation. The residence is occupied by the farm manager and the farm buildings are used for cattle.

Alternative 3

The single family dwellings located at 6441 E County Road E and 8929 E County Road E are located on a dairy farm operation. The residence at 8929 appears to be tenant occupied at this time.

In the owner occupied cases, it may be necessary to replace the residence on the farm site, the replacement housing payment would need to be computed based on reasonable cost for new construction of a functionally equivalent dwelling at the site. The project schedule would need to take into consideration the time required new construction. In the tenant occupied situation, the tenant may be eligible for a farm rent supplement payment as they may need to relocate to another farm where the residence is adjacent to the farm buildings.

The farm at 10240 E. CTH N straddles CTH N and the structures on both sides of CTH N are affected. Both a single family home and farm buildings are within the 200 foot study corridor. They would potentially need to be acquired in which case the owner would be eligible for both a residential and farm replacement payment and services.

Alternative 2b

Regarding the licensed Community Based Residential Facility (CBRF) located at N1366 US 12, records indicate that the facility is licensed for up to 6 disabled individuals. Special services may need to be provided in assisting these individuals, if the business owner has difficulty in replacing with a similar replacement property that would accommodate the same number of occupants or chooses to not continue in business. Providing sufficient time for

finding replacement units or for the approval process for the construction or purchase of a replacement should be provided. If Alternative 2b is selected as the preferred alternative, further coordination with the residents and business owner would be required.

Alternative 2b, 7 and 7a

Within the study corridor, five of fourteen owner-occupied mobile homes would need to be relocated from the Wolf mobile home park on Twinkling Star Road near the southern end of Alternatives 2b, 7 and 7a. This is a lower income neighborhood with some larger families where additional assistance may be needed to find replacement units. There is no room for expansion of the mobile home park on the property. It would be unlikely that the mobile homes could be moved to a new park because existing parks typically have a limit on how old the unit can be. The units in question were manufactured between 1972 and 1989. If the units cannot be moved, they would need to be purchased by the state, in which case the owner occupants may be eligible for both a tenant rent differential payment and replacement housing payment.

11) Estimate the number of households that would be displaced from the occupied residential buildings identified in item 10, above.

Total Number of households to be relocated is indicated in Table 19 on page 85. Note that the numbers indicated here may be greater than the number shown in Table 19 because one occupied apartment building may have more than one household.

Table 20: Characteristics of Displaced Households

Household Characteristic	Alternative 2b	Alternative 3	Alternative 7	Alternative 7a
	Number of Households			
<i>By Ownership</i>				
Owner-occupied	23	12	26	19
Rented quarters	18	2	6	6
<i>By number of bedrooms</i>				
1 bedroom	6	0	1	0
2 bedrooms	9	1	2	3
3 bedrooms	23	10	23	5
4 or more bedrooms	3	3	5	10
<i>By type and price range</i>				
Single-family – Owner Occupied				
\$ 50,000 - \$ 99,999	2	1	3	0
\$ 100,000 - \$149,999	4	5	8	8
\$ 150,000 - \$199,999	9	4	9	5
\$ 200,000 - \$249,999	3	1	0	1
\$ 250,000 - \$299,999	0	0	0	0

Household Characteristic	Alternative 2b	Alternative 3	Alternative 7	Alternative 7a
	Number of Households			
\$ 300,000+	0	1	1	0
Mobile Home - Owner Occupied				
\$ 5,000 - \$ 9,999	2	0	2	2
\$ 10,000 - \$15,999	1	0	1	1
\$ 15,000 - \$19,999	1	0	1	1
\$ 20,000 - \$24,999	0	0	0	0
\$ 25,000 - \$29,999	1	0	1	1
\$ 30,000 +	0	0	0	0

12) Describe the relocation potential in the community.

Table 21: Relocation Potential in Community

Household Characteristic	Number of Comparable Households Available
<i>By Location</i>	
City of Fort Atkinson	56
Town of Koshkonong	14
Town of Lima	10
Town of Milton	36
<i>By number of bedrooms</i>	
1 bedroom	1
2 bedrooms	21
3 bedrooms	53
4 or more bedrooms	41
<i>By type and price range</i>	
Single-family – Owner Occupied	
\$ 50,000 - \$ 99,999	8
\$ 100,000 - \$149,999	42

Household Characteristic	Number of Comparable Households Available
\$ 150,000 - \$199,999	31
\$ 200,000 - \$249,999	14
\$ 250,000 - \$299,999	10
\$ 300,000+	11
Mobile Home - Owner Occupied	
\$ 5,000 - \$ 9,999	0
\$ 10,000 - \$15,999	0
\$ 15,000 - \$19,999	0
\$ 20,000 - \$24,999	2
\$ 25,000 - \$29,999	2
\$ 30,000 +	4
Single-family/Mobile Home – Tenant Occupied	
\$ 600- \$699	1
\$ 700- \$799	3
\$ 800- \$899	5
\$ 900- \$999	0
\$ 1000+	1
Multi-family/Mixed	
\$400-\$499	3
\$500-\$599	7
\$600-\$699	7
\$700-\$799	2
\$800+	1
Duplexes	
\$ 500- \$599	3
\$ 600- \$699	3
\$ 700 - \$799	2

Household Characteristic	Number of Comparable Households Available
\$ 800- \$899	0
\$ 900- \$999	0
\$ 1000+	0

13) Identify all the sources of information used to obtain the data in item 12.

Multiple Listing Services
Milton Courier
Daily Jefferson County Union

14) Describe how relocation assistance will be provided in compliance with the WisDOT Relocation Manual or FHWA regulation 49 CFR Part 24

The assessment of relocation impacts created by a transportation project is mandated by federal and state statutes. Eminent domain is the power of the state to take private property for public use. State statute 32.05 sets forth the procedures for the acquisition and condemnation of property for streets, highways, airports, mass transit facilities and other projects. Section 32.05(8) of the statutes specifies that occupants cannot be removed from a property until a relocation site has been made available. The intent of these statutes is to see that persons displaced by any public project are fairly compensated by payment for the property required and have a place to relocate.

An updated Conceptual Stage Relocation Plan will be prepared for the preferred alternative when one is selected. Preliminary information has been collected and is presented in this DEIS.

Before an agency can start any property acquisition activities for a project, all displacees would be interviewed by a relocation agent to determine the specific needs the individuals, businesses, farms, and nonprofits being displaced by the project. The agency, must, by law, prepare a relocation acquisition stage plan that addresses the specific concerns and how the agency will meet the needs of the displacees.

The agency will prepare the computations to determine a relocation replacement housing payment based on a comparable decent, safe and sanitary housing (DSS). DSS requires the replacement housing fits the relocatees' needs of the displacees, cost within ability to pay, and an adequate number of rooms and area. Units must be structurally sound and provide adequate utility services and be equal to or better than the unit to be acquired.

Residential and business tenants will be assigned a relocation agent who will assist relocatees in finding a comparable building that meets their needs. Relocation entitlements available include reimbursement of moving costs for all individuals with personal property located on the acquired properties. Individuals displaced for a residential unit may be eligible to receive replacement housing assistance. The amount of assistance available to a displacee is determined for 1) a tenant-occupied unit, by computing the difference between the current rent plus utilities and the rent plus utilities over 48 month period for an available comparable, and generally are capped out at \$8,000 and 2) an owner occupied unit is computed based on the difference between the acquisition price and the adjusted listing price of a comparable available replacement unit and is generally capped at \$25,000. If required, these caps may be exceeded in the case of last resort housing. As described earlier, these routes may take the residence associated with dairy farm operations, as the home needs to be in close proximity to the dairy buildings, it may be necessary to consider construction of a functionally equivalent structure on the remainder land.

Businesses, farms and non profits are eligible for necessary moving costs for its personal property and may be eligible for a reestablishment payment up to \$10,000, and a business replacement payment up to \$50,000 for an owner occupied unit and \$30,000 for a tenant occupied unit. The replacement assistance is computed in the same manner as the replacement housing and rent supplement payments for residences. These caps are not exceeded.

Several potential displaced properties are in a mixed used unit or have buildings that will need to be carved-out prior to computing a replacement payment.

Displacees need to file claims with supporting documentation in order to receive their relocation assistance entitlements.

FHWA is in the process of approving rule changes to regulation 49 CFR Part 24, that should be passed prior to this project which will need to be taken in to consideration for the preferred alternative when estimating the potential real estate and relocation costs associated with the project.

Under the current regulations, displaced landowners would be compensated for the fair market value of their acquired property. To determine the fair market value, WisDOT would hire or employ a qualified appraiser who would prepare an appraisal and the owner would be given an offer based on this appraisal. If the owner disagrees with the appraisal, they may find another qualified appraiser at the reasonable expense of WisDOT. The offer would then be negotiated based on the two appraisals. Displaced landowners would be provided with pamphlets on eminent domain and relocation benefits.

If an agreement cannot be reached, WisDOT would give the owner a “jurisdictional offer” and if this offer is rejected by the owner WisDOT may make an “award of compensation”, which allows WisDOT to begin condemnation proceedings. The landowner may appeal this to the County Condemnation Commission or directly to the circuit court. If the landowner succeeds in their appeal, WisDOT would pay legal fees as well as the difference in valuation. Any determination provided the displacee, would be adjusted to reflect the negotiated or awarded settlement for the acquisition of the property.

15) Identify any difficulties or unusual conditions for relocating households displaced by the proposed action

Relocations are necessary with each of the 4 build alternatives. The primary impact will be the relocation of families displaced from the acquired dwellings. Preliminary indications are that there should be an adequate supply of available housing in the project area. No problems are foreseen in providing any of these individuals or families with relocation options. Should special relocation advisory services be required or an unusual problem arises, WisDOT would have relocation personnel to provide the necessary services.

16) Indicate whether Special Relocation Assistance Service will be needed? Describe any special services or housing programs needed to remedy identified difficulties or unusual conditions noted in item #14 above.

Alternatives 2b, 7 and 7a

Wright’s mobile home park near the intersection of Twinkling Star Road and US 12 in southern Jefferson County could require relocation of up to 5 mobile home owners who are tenants in the mobile home park. The mobile homes cannot be relocated or realigned in the current park as there is no available land on site for the owner to create replacement lots. There are no other mobile home parks located within the Town of Koshkonong and no lands zoned for such uses. Lands would need to be rezoned to accommodate a new mobile home park. If space would be available at one of the mobile home parks located in the surrounding area, the park may not accept the home due to the age and condition of the units which were constructed between 1972 and 1989. These occupants may be eligible for a moving expense payment to relocate their unit to another park and a rent supplement payment. If the unit cannot be relocated, the owner would be eligible for a replacement housing payment which would be the difference between the acquisition price of their mobile home and the price of purchase of a replacement mobile home. If the unit is in another mobile home park, they may be eligible for a rent supplement payment if the rent at new park is greater than that at the current park. Discussions with individuals in the park indicated that one of the units has a large family and that they have limited income, which could require additional services.

Alternatives 2b

The licensed Community Based Residential Facility (CBRF) business located at N1366 US 12 may require special services. Records indicate that the facility is licensed for up to 6 disabled individuals. If the CBRF cannot be replaced, special services may need to be provided in assisting these individuals in finding space in comparable units and assistance.

17) Describe any additional measures which would be used to minimize adverse effects or provide benefits to those relocated, those remaining, or to community facilities affected.

No additional measures were identified.

3. Economic Development and Business Impact Evaluation Factor Sheet

1) Describe the economic development or existing business areas affected by the proposed action.

No Action and Alternatives 1a and 2b

These alternatives can be expected to affect two of the City's existing business areas:

The Downtown District of the City of Fort Atkinson is the historical central business district along Main Street. As described in the City's Master Plan, the downtown has remained the primary shopping district for the city and the location of most of the primary governmental and cultural institutions. The City is making improvements to a riverwalk, parks and a bicycle trail downtown as planned in their Master Plan. It is a goal of the City to maintain downtown Fort Atkinson as the commercial center for the community, with an emphasis on specialty retail, services, and government and institutional uses.

Whitewater Avenue (US 12 on the south side of Fort Atkinson) supports many commercial uses. Commercial land use is planned here from Rockwell Avenue, south to CTH M. The City plans to develop this area as an attractive, peripheral commercial district. It is their plan to consolidate driveway and roadway access along this route.

Alternative 3

There are no business districts along CTH N between Whitewater and WIS 26.

Alternatives 7/7a

These alternatives are in the countryside and the main businesses are farms and dairies.

2) Identify and discuss the existing modes of transportation and their traffic within the economic development or existing business area.

Personal vehicles are the most common of the existing modes of transportation within the study area. Biking is also encouraged as the city has purchased the rail corridor that runs through the central business district for a bike trail. Likewise, the City continues to improve the Riverwalk to encourage pedestrian use in the downtown central business district. Fort Atkinson does not have a public transit system.

Semi-truck traffic is common along the existing route as it is a long truck route. Based upon data gathered in the origin-destination studies for the needs assessment, approximately one third of the traffic is estimated to be regional traffic.

3) Place an "X" in the appropriate box below if one of the populations indicated would be *disproportionately* affected by the proposal. Give a brief description of the community/neighborhood and population affected by the proposed action. Include demographic characteristics of those affected by the proposal. For the populations shown below, The Orders issued by the U.S. Department of Transportation and its implementing agencies to satisfy the requirements of Executive Order 12898 require an evaluation to determine whether a minority and/or low income population would experience a disproportionately high and adverse effect. If any of the populations shown below are affected, the Environmental Justice Factor Sheet, along with the remaining items on this worksheet will need to be completed to satisfy Environmental Justice requirements

- a) ☒ NO Disabled population is not affected
☐ YES Disabled population is affected – See Environmental Justice Factor Sheet
- b) ☒ NO Elderly population is not affected
☐ YES Elderly are affected - See Environmental Justice Factor Sheet
- c) ☒ NO Minority populations are not affected
☐ YES Minority populations are affected - See Environmental Justice Factor Sheet
- d) ☒ No Low-income populations are not affected
☐ Yes Low income populations are affected - See Environmental Justice Factor Sheet

4) Identify and discuss effects on the economic development potential and existing businesses that are dependent upon the transportation facility for continued economic viability.

- ☐ The proposed project will have no effect on a transportation-dependent business or industry.
- ☒ The proposed action will change the conditions for a business that is dependent upon the transportation facility. Identify effects, including effects that may occur during construction.

No Action and Alternative 1a

With the projected increase in traffic congestion, the City expects that its economic viability will be negatively affected by decreased access and mobility.

Alternative 2b

At the City of Fort Atkinson expert interview meeting, participants stated that for these reasons, Alternative 2b would be in conflict with their plans for the downtown, which is to create a pleasant, pedestrian friendly environment where people are encouraged to stop and spend time in the downtown area. The change to a one-way pair could cause problems with vehicle access to businesses as they would only have right-in, right-out access where currently they can enter from either direction in most cases. This may require some vehicles to extend their trips to reach their destination from the proper direction. Semi-truck access to loading docks may be an issue that should be studied further if this alternative is selected as the preferred alternative.

Alternative 3

This alternative would not likely substantially change existing conditions. The Robert L. Klement Business Park on the south side of Fort Atkinson would not realize any of the benefits of the bypass alternatives.

Alternative 7 and 7a

The City of Fort Atkinson's Robert L. Klement Business Park would have a new access point. Business 26 would be relocated to Commerce Parkway, through the park. This would improve visibility of the park and could attract more businesses to locate there. Currently about 95 acres of the 140-acre park are vacant. Of the vacant area, 45 acres has infrastructure. See Figure 25 on page 98 for the plat of the Business Park.

The Downtown District of Fort Atkinson would have less heavy vehicle traffic, improving the atmosphere and making it more conducive to local pedestrian and vehicular traffic. It is expected that 66% of the regional traffic could be diverted using one of the bypass alternatives.

Alternative 7 and 7a

The bypass alternatives will improve access to the Robert L. Klement business park.

5) Estimate the number of businesses and jobs that would be created or displaced because of the project.

Table 22: Number of Businesses and Jobs that would be Created or Displaced²¹

Type of Business	Number of Businesses Displaced	Number of Jobs Displaced
Alternative 2b		
Retail	1	0
Service	3	7-17
Wholesale	0	0
Manufacturing	0	0

²¹ WisDOT. ReferenceUSA (Version 2004.11), from the Library Division of infoUSA.

Type of Business	Number of Businesses Displaced	Number of Jobs Displaced
Farm	1	To be determined*
<i>TOTAL ALT 2b</i>	<i>5?</i>	<i>7 to >17</i>
Alternative 3		
Retail	0	0
Service	1	To be determined*
Wholesale	0	0
Manufacturing	0	0
Farm	2	To be determined*
<i>TOTAL ALT 3</i>	<i>3</i>	<i>To be determined*</i>
Alternative 7		
Retail	0	0
Service	1	5-9
Wholesale	0	0
Manufacturing	0	0
Farm	1	To be determined*
<i>TOTAL ALT 7</i>	<i>2</i>	<i>5 to >9</i>
Alternative 7a		
Retail	0	0
Service	1	7-17
Wholesale	0	0
Manufacturing	0	0
Farm	2	To be determined*
<i>TOTAL ALT 7a</i>	<i>3</i>	<i>7 to >17</i>

* At this stage, the study did not include interviews of the local businesses and farms for numbers that would be displaced. Data was found for some of the establishments and those are reported above.
See Question 12(b) below.

Job creation from highway projects is an unsettled topic. One DOT study calculates through an input/output model, that each billion dollars of highway spending by the federal government will lead to employment benefits totaling 47,576 person-years. Using this formula would create the following jobs in person years:

Table 23: Jobs Created

Alternative	Jobs Created (in person years)
2b	1,370
3	785
7	2,127
7a	1,913

Input/Output models are inherently limited and arguments can be made that government funding not be spent on highway projects would go toward other projects that would in turn create jobs, nullifying the net impact on the economy of a road building project.

It is not anticipated that any businesses would be created as a direct result of any of the alternatives.

6) Identify any special characteristics of the created or displaced businesses or their employees.

Detailed study of the employee make-up of each displaced business would be completed for the Relocation Study on the selected preferred alternative. It is not expected the businesses noted above that could potentially be displaced would exclusively or specifically employ a number of disabled, elderly, minority or low-income groups.

7) Is Special Relocation Assistance Needed?

See Question 10, below.

8) Describe the business relocation potential in the community.

Farms and businesses are more difficult to relocate than residences. Finding available comparable farm/commercial properties for the businesses/farms described in Question 10 would be difficult and new construction may be the only option.

9) Describe how relocation assistance will be provided in compliance with the WisDOT Relocation Manual or FHWA Regulation 49 CFR Part 24.

Wisconsin's relocation law and regulations can be found in Sections 32.185 – 32.27, Wisconsin Statutes Ch. COMM 202, Wisconsin Administrative Code. A brochure is available from WisDOT describing relocation rights of business, farm and nonprofit organizations.

The assessment of relocation impacts created by a transportation project is mandated by federal and state statutes. Eminent domain is the power of the state to take private property for public use. State statute 32.05 sets forth the procedures for the acquisition and condemnation of property for streets, highways, airports, mass transit facilities and other projects. Section 32.05(8) of the statutes specifies that occupants cannot be removed from a property until a relocation site has been made available. The intent of these statutes is to see that persons displaced by any public project are fairly compensated by payment for the property required and have a place to relocate.

A formal Conceptual Stage Relocation Plan will be prepared for the preferred alternative when one is selected. Preliminary information has been collected and is presented in this DEIS.

10) Identify any difficulties for relocating a business displaced by the proposed action and describe any special services needed to remedy identified unusual conditions.

Farms and businesses are usually more difficult to relocate than residences. Finding available comparable farm/commercial properties can be difficult and new construction may be the only option. For this project, aside from the business and farms described below, it is not anticipated that there would be any unusual requirements for businesses or farms that would prevent their successful relocation. There are currently several farm operations and restaurants listed for sale in the surrounding area. This project would not however be built for

several years. In the future, finding replacement farms may be more difficult if current development trends continue. More land will likely be developed into non-farm uses, decreasing the amount of farmland available.

Alternative 7a - Pond Hill Dairy LLC

Pond Hill Dairy currently has approximately 700 cows, 500 heifers and employs approximately 12 individuals on approximately 1,200 acres. The alignment of Alternative 7a may require the acquisition of all the structures, including a residence, at its farm on Groeler Road, where they house dry cows. The acquisition of these structures does not appear to put Pond Farm Dairy out of business as it has another residence, farm structures and its milking operation located on land it owns south of the 7a alignment on Poeppel Road. The residence on Groeler Road is currently occupied by the farm's manager. It is not known whether Pond Hill Dairy will need to replace the residence and other farm buildings and structures to be acquired. They may be able to relocate to other facilities it owns, or may elect to replace the structures to be acquired on the remainder lands. The manager may be eligible for a rent supplemental payment in addition to residential moving expenses, depending how his relocation is handled by his employer. The project schedule should consider time that may be required for Pond Hill Dairy to reconstruct the structures on its remaining land.

Alternative 2b - Cedar Hill CBRF LLC

A replacement location would need to be remodeled or built to meet the requirements of the CBRF and be located sufficient distance from other comparable facilities to obtain the necessary zoning permits. The project would need to provide sufficient time for the zoning approval, new construction or modification of an existing parcel for the CBRF. Replacement of the facility is the best relocation option for the current occupants. If the owner chooses not to replace the facility, additional time would be required to find suitable replacement locations for its handicapped tenant occupants.

As long there is sufficient time for new construction and obtaining of required permits, it is not anticipated that there would be any unusual requirements for any of the businesses or farms that would prevent their successful relocation. There are currently several farm operations and restaurants listed for sale in the surrounding area. There is replacement commercial space for sale and for rent in the area suitable for the ones to be displaced. This project is not planned for several years, the steady growth of the area will continue to provide additional replacement options for the commercial space, and the same growth may make finding comparable replacement farms more difficult as the current farms are converted to other land uses.

11) Describe any additional measures which would be used to minimize adverse effects or provide benefits to those relocated, those remaining, or to community facilities affected.

No additional measures other than those mentioned herein, have been identified at this time.

12) Generally describe both the beneficial and adverse effects accruing to:

a) The area's economic development potential or existing business area caused by the proposed action. Include any factors identified by business people that they feel are important or controversial.

No Action and Alternative 1a

Beneficial

Keeping the highway as is may maintain the level of potential customers currently using US 12.

Adverse

Taking no action would not address the identified congestion and safety problems that would hinder the pedestrian friendly atmosphere that the Chamber of Commerce has indicated as being an important factor in attracting shoppers to the central business district. As congestion increases, the benefits of this alternative would decrease accordingly.

Alternative 3

Adverse

Eight farms would lose buildings or farm residences with Alternative 3. Such loss can cause economic hardship to farmers and would impact the farm businesses. Alternative 3 does not have the severances that the bypass alternatives 7 and 7a do and so would not be as great an impact as those alternatives.

Alternative 7 and 7a

Beneficial

Alternatives 7 and 7a would both increase the viability of downtown Fort Atkinson by reducing traffic congestion and safety problems and so making a more attractive shopping district. Alternatives 7 and 7a would provide access to the city's business park on Fort Atkinson's southwest side.

Adverse

Eight farms would be severed by Alternative 7 and 6 by Alternative 7a. Alternative 7a is anticipated to have the greatest negative impact on farm business operations because it affects some very large dairy operations, especially the Hartwig and Pond Dairy LLC farms and others as indicated on the Agricultural Impact Factor Sheet.

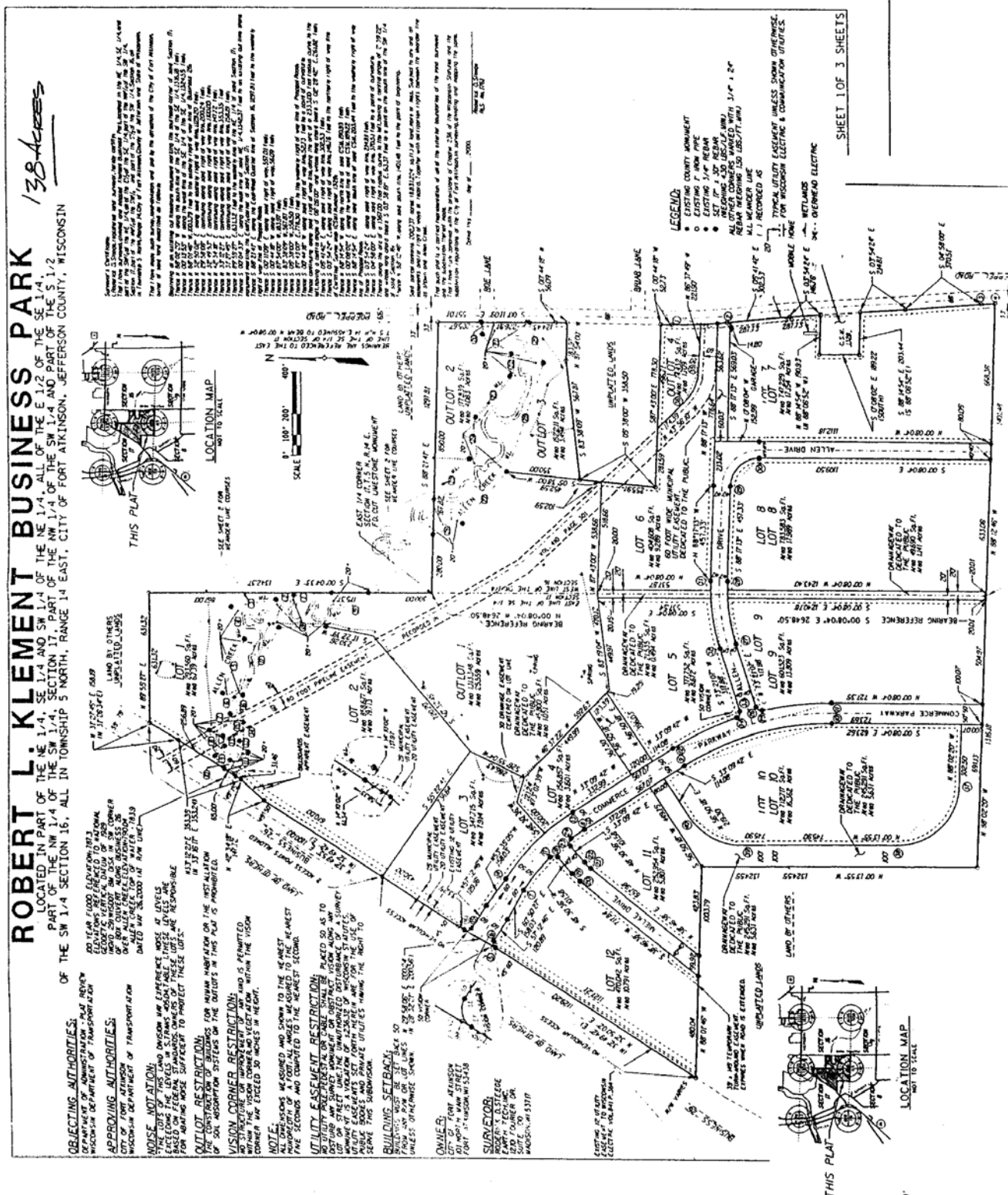
Eight farms would lose buildings with Alternative 7 and 7 farms would lose buildings with Alternative 7a. Losing farm buildings can cause economic hardship to farms and would impact the farm businesses.

b) The employment potential and existing employees in businesses affected by the proposal. Include, as appropriate, a discussion of effects accruing to minority populations or low-income populations.

Alternative 1 and 1a	Not applicable. No businesses would be displaced.
Alternative 2b	Records show that Saxes Restaurant has 5 to 9 employees, Baker Glass, LLC has 1-4 employees, and Rural Insurance Office has 1-4 employees. The number of employees at Cedar Hill CBRF is unknown at this time.
Alternative 3	Saxes Restaurant has 5 to 9 employees
Alternative 7	Saxes Restaurant has 5 to 9 employees
Alternative 7a	Saxes Restaurant has 5 to 9 employees

Individual businesses were not interviewed for the Conceptual Stage Relocation Study and therefore racial and income level makeup of the various employees is unknown at this time.

Labor force participation rates are high in Jefferson County. In 2004 the unemployment rate has ranged from a high of 6.4 percent in February and a low of 4.2 in September (most recent data available for this report). The Jefferson County Workforce Profile of January 2004 indicates that among the top ten occupations with the most openings are food preparation and service, retail salespersons, cashiers, waiters and waitresses, registered nurses, and office clerks. These statistics indicate that based upon the types of business operations affected by the various alternatives, re-employment of people who might lose their positions, would not be exceptionally difficult.



Source: Fort Atkinson Industrial Development Corporation

4. Agricultural Impact Evaluation Factor Sheet

The Department of Agriculture, Trade and Consumer Production (DATCP) has agreed that An Agricultural Impact Statement (AIS) should be prepared after the selection of a preferred alternative. The AIS will assess the potential environmental consequences of the preferred alternative on the nearby farm operations. In accordance with standard AIS procedure, copies of the completed AIS will be sent to all farm operators in the project corridor. Appendix G has been reserved for the AIS.

In accordance with the Farmland Protection Policy Act, a Farmland Conversion Impact Rating Form (AD-1006) has been completed for each alternative and is presented in Appendix H. The impact rating evaluates the proposed conversion of farmland to highway uses.

Table 24: Type of Land Acquired from Farm Operations

Type of Land Acquired from Farm Operations:	Alt 1	Alt 1a	Alt 2b	Alt 3	Alt 7	Alt 7a
Agriculture acres	0	0	88	83	257	239
Woodland acres	0	0	11	0	19	23
Land of undetermined or other use (e.g., wetlands, residential, transportation, etc.) acres	0	0	62	11	75	32
TOTAL ACRES	0	0	161	94	351	294

Source: Jefferson County

Table 25: Number of Farms That Would Be Impacted

Number of farm operations:	Alt 1	Alt 1a	Alt 2b	Alt 3	Alt 7	Alt 7a
from which land would be acquired	0	0	17	37	20	20
that would be severed	0	0	0	0	8	6
that would lose buildings	0	0	1	2	1	2
that would require relocation of the residence	0	0	1	2	1	2

Source: HNTB Corporation

2) Identify and describe the effects to farm operations because of land lost due to the project.

The Department of Agriculture, Trade, and Consumer Protection indicates that generally, farmers who lose land due to projects such as the proposed one may have difficulty finding comparable land for the following reasons:

- Other farmers will also be in the market, increasing demand.
- The overall supply of farmland will decrease due to right-of-way acquisitions.
- The productive potential of available farmland may be less than the farmland taken.
- Travel distances to available farmland may be prohibitive.

Impacts to existing farms would mainly involve the loss of land adjacent to the existing US 12. This would occur when the road is widened. On the new alignments of Alternatives 7 and 7a, farm severances would occur.

Alternative 1 and 1a

There would be no loss of farm land due to Alternatives 1 and 1a.

Alternative 2b

This alternative does not involve any drainage districts, but is likely to affect farmland with drainage tiling or grassed waterways. From a field review, it appears that the Kriedeman and Stade farms may be drain tiled. DATCP states

that approximately 54% of the soils along this alternative between Twinkling Star Road and Fort Atkinson are prime; approximately 27% are prime where drained.

Alternative 3

Impacts to existing farms would mainly involve the loss of land adjacent to the existing County N. This would occur when land is purchased for the future acquisition of right of way for clear zones and widening. The roadway would remain on alignment, so the separation of farm operations is not indicated.

This alternative would affect Drainage District #5 in Rock County; the drainage district covers 1,720 acres. DATCP states that approximately 62% of the soils along this alternative between US 12 and WIS 26 are prime; approximately 15% are prime where drained.

Alternative 7

Twenty farms would be impacted and/or severed by the construction of this alternative. Impacts to farming operations would involve the land lost to the roadway construction, as well as the potential separation of farming operations.

This alternative does not involve any drainage districts, but is likely to affect farmland with drainage tiling or grassed waterways. From a field review it appears that the Kriedeman, Stoller and Majesz farms are drain tiled. DATCP states that approximately 50% of the soils along this alternative between US 12 and WIS 26 are prime; approximately 19% are prime where drained.

Alternative 7a

Approximately 20 farms would be impacted and/or severed by the construction of this alternative. Impacts to farming operations would involve the land lost to the roadway construction, as well as the potential separation of farming operations.

This alternative does not involve any drainage districts, but is likely to affect farmland with drainage tiling or grassed waterways. DATCP states that approximately 73% of the soils along this alternative between US 12 and WIS 26 are prime; approximately 4% are prime where drained.

The town of Koshkonong has expressed concerns that a bypass would impact large dairy and cattle businesses in their community and that they would lose acreage from the proposed bypass alignments 7 and 7a, particularly at the Highway 26 interchange. It should be noted that the proposed interchange at Highway 26 is already within the urban service area as shown in the *Jefferson County Agricultural Preservation and Land Use Plan*.

3) Describe changes in access to farm operations caused by proposed action.

Access changes to farm operations would occur where medians are installed in the 4-lane roadway and median openings are not provided. Access changes would occur as indicated in Table 18 on page 82. DATCP indicates that when access to farms is altered, the resulting access plan may lead to farmers traveling longer distances or using side roads, resulting in greater time spent and increased cost in farming the parcels.

Alternative 3

One farm (parcel 6-13-89, Hanlon) at the west end of the corridor would have access altered in that a median would be added where the roadway splits into a divided highway at the interchange approaches, giving the farm right-in, right-out access only.

Alternative 7

Access to farm operations would be altered due to this alternative. This alternative would be an access controlled 4-lane roadway along the bypass portion and access controlled 4-lane roadway from the US 12 Whitewater bypass to the Alternative 7 bypass; therefore, access concession would be necessary for those farms and farm owners affected by the construction. Possible modifications to field entrances would be made during a future engineering design phase.

Alternative 7a

Access to farm operations would likely be altered due to this alternative. This alternative would be a limited-access

4-lane roadway; therefore, access concession would be necessary for those farms and farm owners affected by the construction. Possible modifications to field entrances would be made during a future engineering design phase.

At the expert interview meeting conducted for the secondary and cumulative impacts study, a town official mentioned that the dairy and cattle operations located on the western side of the town provide manure for the crop producers on the eastern side of town. The Town of Koshkonong mentioned that alignment 7a would sever east-west connections through the town and disrupt manure management practices. Furthermore, the bypass, particularly alignment 7a would diminish efficiencies for agricultural businesses as traffic circulation in multiple directions would be cut off except at the interchanges.

4) Indicate whether a farm operation will be severed because of the project and describe the severance (include area of original farm and the size of any remnant parcels).

Alternatives 1, 1a, 2b and 3

No farms would be severed because of these alternatives.

Alternative 7 and 7a

This study identified 8 farms that would potentially be severed by Alternative 7 and 12 farms on Alternative 7a. Table 26 on page 102 shows the areas owned and farmed by particular property owners. Acreages do not indicate the exact amount cropped, rather the total acreage of contiguously owned properties that appear to be farmed together from examination of aerial photography. The estimated acreage may contain non-cultivated areas. The identified landowners have not yet been consulted regarding the following acreages. More detailed acreages would need to be determined in the Agricultural Impact Statement to be prepared for the preferred alternative.

Table 26: Farm Severances

Property Owner	Parcel ID Number(s)	Area of original parcels	Area of remnant parcels
Alternative 7			
Marcia A. Stade Trust	016-0514-2323-000 016-0514-2322-000	67 acres	6 acres 5 acres <u>18 acres</u> Total 29 acres
Minnie L. Kriedeman (John)	016-0514-1433-000 016-0514-1544-000 016-0514-1541-001	100 acres	70 acres 12 acres Total 82 acres
Theodore P Majesz Trust	016-0514-1513-004 016-0514-1432-000 016-0514-1541-000 016-0514-1542-000 016-0514-1543-000	119 acres	93 acres <u>13 acres</u> Total 106 acres
Russell H Ganzow	016-0514-1531-000 016-0514-1534-001	63 acres	12 acres 40 acres Total 52 acres
Bruce C. Tipton	016-0514-1532-000 016-0514-1533-000	60 acres	5 acres <u>44 acres</u> Total 49 acres
Erwin C. Poeppel Trust	016-0514-1641-000 016-0514-1644-000 016-0514-1643-000 016-0514-1643-000 016-0514-1642-000 016-0514-1634-000 016-0514-2121-000 016-0514-2122-000 016-0514-2123-000 016-0514-2124-003 016-0514-2124-000	349 acres	95 acres <u>201 acres</u> Total 296 acres
Helen M. Dettman	016-0514-2014-000 016-0514-2011-000	81 acres	38 acres <u>22 acres</u> Total 60 acres
Pond Hill Dairy LLC	016-0514-1743-000 016-0514-2012-000 016-0514-2013-000	96 acres	52 acres <u>15 acres</u> Total 67 acres
Alternative 7a			
Superior Env Serv Inc	016-0514-2642-000 016-0514-2641-001 016-0514-2643-000 016-0514-2644-000 016-0514-3521-001 016-0514-3521-002 016-0514-3523-000 016-0514-3524-000	239 acres	38 acres 44 acres 8 acres 120 acres <u>2 acres</u> Total 212 acres
Heritage Std Bk & Trust and James M. Bradley	016-0514-2631-000 016-0514-2634-001	45 acres	35 acres <u>6 acres</u> Total 41 acres
Michael T & Delia H Welch	016-0514-2633-000 016-0514-2632-000	81 acres	30 acres <u>38 acres</u> Total 68 acres
Edwin J. Rymut	016-0514-2732-000 016-0514-2733-003 016-0514-2734-000 016-0514-2743-001	95 acres	18 acres <u>58 acres</u> Total 76 acres

Property Owner	Parcel ID Number(s)	Area of original parcels	Area of remnant parcels
Joann C Steffen	016-0514-2841-000 016-0514-2844-001 016-0514-2843-000 016-0514-2842-001	87 acres	53 acres <u>19 acres</u> Total 72 acres
Lydia Eckart (Fogel Yvonne Trust)	016-0514-2722-001 016-0514-2814-000 016-0514-2813-000	106 acres	1 acre <u>96 acres</u> Total 97 acres
Jonathan P Hartwig	016-0514-2821-000 016-0514-2842-000 016-0514-2831-000 016-0514-2822-001 016-0514-2824-000 016-0514-2822-000	167 acres	114 acres 17 acres <u>11 acres</u> Total 130 acres
Robert L. McIntyre Jr	016-0514-2132-000 016-0514-2233-000 016-0514-2812-000 016-0514-2134-000 016-0514-2131-000 016-0514-2133-000 016-0514-2143-000 016-0514-2811-000 016-0514-2142-000	318 acres	19 acres 2 acres <u>267 acres</u> Total 288
Pond Hill Dairy LLC	016-0514-1743-000 016-0514-2012-000 016-0514-2013-000	97 acres	69 acres <u>2 acres</u> Total 71 acres
Pond Hill Dairy LLC	016-0514-2041-000 016-0514-2044-000 016-0514-2911-000 016-0514-2912-000 016-0514-2911-001 016-0514-2913-000 016-0514-2914-000	280 acres	249 acres 0.5 acres <u>15 acres</u> 264.5 acres
Erwin C. Poeppel	016-0514-1641-000 016-0514-1644-000 016-0514-1643-000 016-0514-1643-000 016-0514-1642-000 016-0514-1634-000 016-0514-2121-000 016-0514-2122-000 016-0514-2123-000 016-0514-2124-003 016-0514-2124-000	349 acres	4 acres <u>344 acres</u> 348 acres
Helen M. Dettman	016-0514-2014-000 016-0514-2011-000	81 acres	55 acres <u>15 acres</u> 70 acres

5) Identify and describe effects generated by the acquisition or relocation of farm operation buildings, structures or improvements, e.g., barns, silos, stock watering ponds, irrigation wells, etc. As appropriate, address the location, type, condition and importance to the farm operation.

The Conceptual Relocation Study in Appendix C would be updated to include additional details regarding structures and improvements of farms to be acquired, if any, for the preferred alternative. If a build alternative is chosen and after the route is designed, and prior to negotiations for farmland required for the project, the Department would prepare an Acquisition Stage Relocation Assistance Plan and would interview potentially displaced occupants of the farm operations to determine the details of the type, condition and importance of displaced farm improvements.

No Action, Alternative 1a

No farmland acquisition or relocations would be associated with these alternatives.

Alternative 2b

Alternative 2b would require the acquisition or relocation of buildings, structures or improvements that could be used for farm operations from 6 properties. At this time only 4 appear to be active farm operations, at least two of which appear to be dairy operations. The buildings, structures and other improvements being acquired from a farm may create a total displacement of the farm operation. In order to minimize the disruptive effect to dairy operations, replacement assistance would consider construction of new residences associated with these dairy operations on the remainder of their land. There are farms available for sale in the area, but if the area develops further and farmland is converted to other uses, available farms may be more limited and construction on the remainder site may need to be considered as a replacement option.

Alternative 3

Alternative 3 would require the acquisition or relocation of farm operation buildings, structures or improvements from 6 properties. For three of the farms, the residence is the only major structure that would need to be acquired. Two of these residences are associated with dairy operations. In order to minimize the disruptive effect to the dairy operations, replacement assistance should consider construction of new residences on the remainder land near the farm operation.

Alternative 7

Buildings, structures or improvements that could be used for farm operations would be acquired from 7 properties on Alternative 7.

Alternative 7 would require the acquisition of residences associated with dairy operations. In order to minimize the disruptive effect to the dairy operations, replacement assistance would consider construction of new residences on the remainder land near the farm operation.

Alternative 7a

Buildings, structures or improvements that could be used for farm operations would be acquired from 5 properties on Alternative 7a.

Alternative 7 would require the acquisition of residences associated with dairy operations. In order to minimize the disruptive effect to the dairy operations, replacement assistance would consider construction of new residences on the remainder land near the farm operation.

Alternative 7a would require the acquisition of the residence and farm improvements for Pond Hill Dairy, LLC's northern farm on Groeler Road. The acquisition of this farm would not be expected to put Pond Hill Dairy, LLC out of business. It is understood that this residence is occupied by the farm manager and the farm facilities there house dry cows. In 2004, Pond Hill Dairy had approximately 700 cows, 500 heifers and employed approximately 12 individuals. To relocate that portion of the operation from that location would disrupt the farm operations. Access between the southerly and northerly acreage would be affected by this alignment.

6) Describe effects caused by the elimination or relocation of a cattle/equipment pass or crossing. Attach plans, sketches, or other graphics as needed to clearly illustrate existing and proposed location of any cattle/equipment pass or crossing:

At this stage, no cattle crossings have been identified in the project area. On Alternative 7a, the Hartwig farm buildings are separated from the majority of their tillable land. One solution could be to create an equipment pass to cross the highway corridor and provide the farmer with access to the fields.

7) Describe the effects generated by the obliteration of the old roadway.

No Action, 1a and 3

No roadways would be obliterated.

Alternative 2b

Roadways along Alternative 2b that would be obliterated where intersections have been realigned include Creamery Road, Cheesebroro Road, Carnes Road, Hackbarth Road, CTH M, and CTH K. See Figure 13 on page 39.

Alternative 7

Old roadway would be obliterated where intersections are realigned at Buckingham and Twinkling Star Roads, Hoge, Creamery and Cheesebroro Roads, as well as US 12 at the new interchange south of Fort Atkinson. The rebuilt South Fort Interchange at WIS 26 and Alternative 7 bypass would require obliteration of existing roads. See Figure 18 on page 44.

Alternative 7a

Old roadway would be obliterated where intersections are realigned at Buckingham and Twinkling Star Roads, Hoge and Creamery Roads, Poeppel Road and roadway within the South Fort WIS 26 interchange. See Figure 19 on page 45.

8) Identify and describe any proposed changes in the land use or secondary development that will affect farm operations that relate to the development of this project.

Land use in the vicinity of US 12 would remain relatively constant as agricultural and residential. Increased capacity of US 12 may potentially result in increased development in the vicinity of the corridor, especially in areas near the City of Fort Atkinson. Such potential future development could lead to the conversion of agricultural lands to other non-agricultural uses. Conversion would be under the control of the local community and their implementation of zoning and land use planning regulations.

Alternative 2b

DATCP indicates that Alternative 2b would have the potential secondary impact associated with radial expansion from two to four lanes of US 12. Generally, DATCP indicates that highway projects can create secondary impacts by encouraging residents to relocate further from their destinations (employment, schools, and commercial centers) because improved roads allow for more efficient travel. With an influx of urban residents, conflicts may arise over practices typically associated with farming – odors, noise, pesticide and herbicide use. Ultimately, these conflicts may cause some farmers to alter their practices, limit farming expansion, or quit farming altogether.

Alternative 3

Of the 4 proposed build alternatives; DATCP indicates that Alternative 3 is their most preferred for the following reasons:

- The alternative does not create an entirely new corridor.
- The alternative does not increase highway lane capacity, though the right-of-way width would be increased.
- Existing farm parcels are not fragmented and the alternative requires fewer farmland acres.
- The alternative is distant enough from Fort Atkinson that it would not have typical bypass impacts on land use.
- Land use in the vicinity of CTH N would remain relatively constant; i.e. agricultural and residential.

It should be noted that although there would be an interchange at the west end of the study corridor, it is to be constructed as a part of the separate WIS 26 highway project. Typically, the concern for over-development at interchanges is related to limited access routes where the interchanges provide sporadic access. Alternative 3 in and of itself would not further limit access along the existing County N route. Although WIS 26 is limited access to the north, the impacts at this interchange would be due to that project, not as a result of Alternative 3.

Alternatives 7 and 7a

Construction of this alternative may potentially result in increased development south of Fort Atkinson, leading to additional loss of farm land. DATCP states that this alternative would likely have substantial secondary impacts on farmland in southern Jefferson County. The alternative involves a partial bypass of Fort Atkinson and would need to be analyzed by DATCP in terms of its effects when combined with the already existing bypass of Fort Atkinson as well as the increase of the existing WIS 26 bypass scheduled for 2008. Additional secondary impacts may result from the capacity increase from two to four lanes into and out of Whitewater as it relates to recent development on Whitewater's west side.

9) Describe any other project-related effects identified by a farm operator or owner that may be adverse, beneficial or controversial.

General comments received from farm owners and operators relate to their concern over the loss of field access and the potential loss of farm buildings at select locations.

Alternative 3

Concerns raised specific to Alternative 3 include the potential for increased traffic interfering with farm equipment moving from field to field and the loss of acreage to road right-of-way.

10) Indicate whether minority population or low-income population farm owners, operators, or workers will be affected by the proposal. (Include migrant workers if appropriate.)

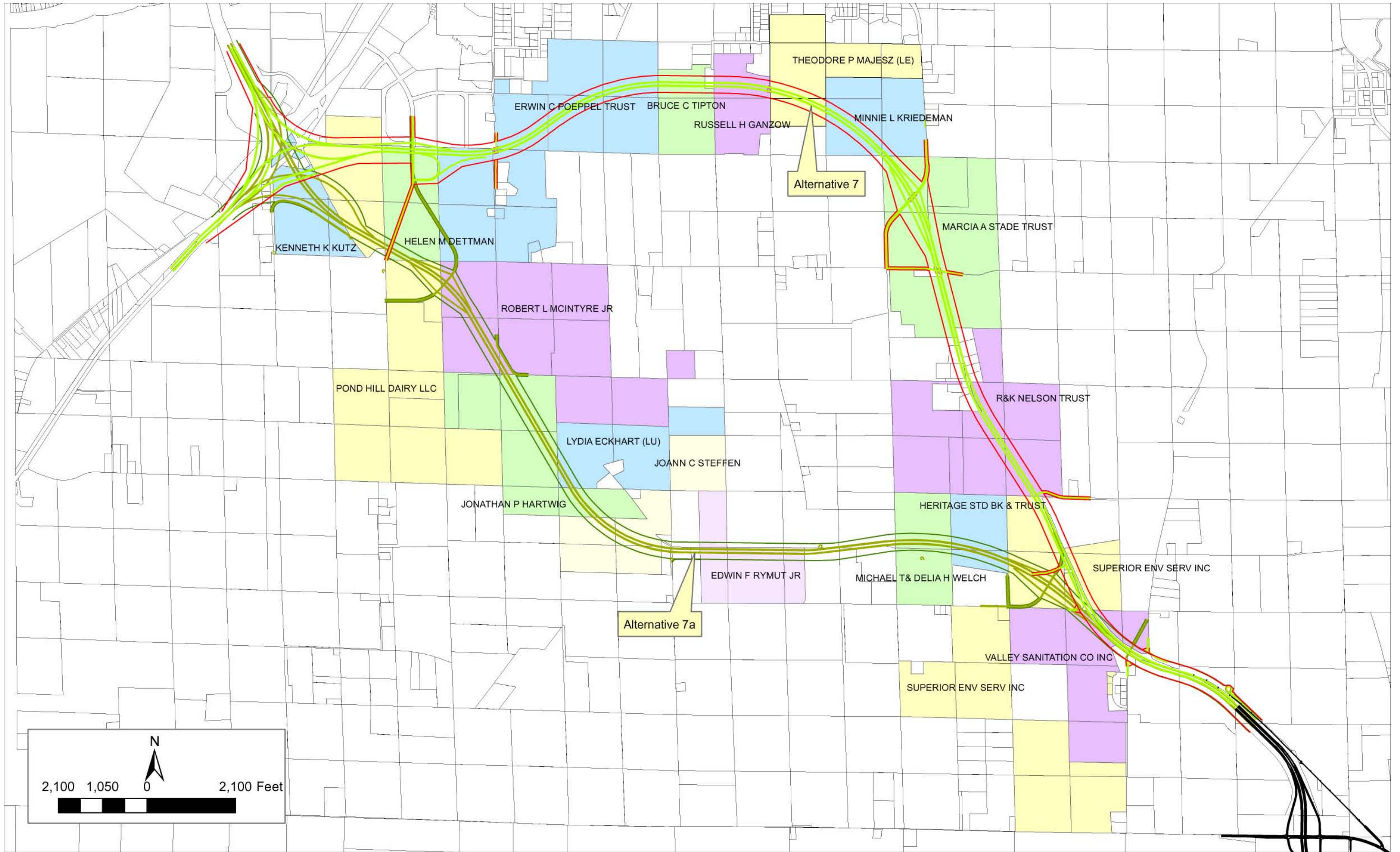
☒ No disproportionate effects will accrue to farm owners, operators or workers from minority populations or low-income populations

☐ Yes - Discuss

11) Describe measures to minimize adverse effects or enhance benefits.

In final design, land acquisition would be minimized by designing the facility as close to the existing US 12 as design standards and site conditions will allow.

The study corridor of 200 to 400 feet wide is more than what final design would require so that there may be room to adjust the alignment to minimize impacts identified in the environmental impact study.



Source: Jefferson County, HNTB Corporation

5. Environmental Justice Evaluation Factor Sheet

1) Describe how the project development process complied with Executive Order 12898 on Environmental Justice. (EO 12898 requires agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse human health and environmental effects on minority populations and low-income populations, including the interrelated social and economic effects. Include those covered by the Americans with Disabilities Act and the Age Discriminate)

a) Identify sources of data used to determine presence of minority populations and low income populations.

- ☒ Windshield Survey
- ☐ Survey Questionnaire
- ☐ Door to door
- ☐ WisDOT Real Estate
- ☒ US Census Data (2000)
- ☐ Real Estate Company: Identify Real Estate Company
- ☐ Human resource Agency: Identify agency
- ☐ Official Plan: Identify Plan, Approval Authority, and Date of Approval
- ☒ Other:

Contact with the Clerks of the area Townships was valuable in determining the makeup of potential sensitive populations.

WisDOT made efforts to uncover any unknown populations. Notices were placed on advertisements for public meetings and hearings giving the TDD phone number and stating that accommodations can be made for anyone requesting it.

Newsletters had sidebars regarding Environmental Justice with the following statement:

"Environmental justice: Equity sought in transportation planning Public involvement is for absolutely everyone. WisDOT is committed to equity and fairness, and it wants to ensure that no one is excluded from the US 12 project decision-making process. Identifying and addressing disproportionately high and adverse effects on minority, low-income, disabled or elderly individuals will help achieve environmental justice and promote nondiscrimination in your community. If you know of anyone who may be impacted by this project and whose voice is not being heard, please contact WisDOT District 1 Project Manager Scott Simmons at (608) 246-5444. Luther Elementary School in Fort Atkinson, site of the Nov. 19 public information meeting, is wheelchair accessible. For more information or to place a request for assistance at the meeting, please call Simmons or the Wisconsin Telecommunications Relay System at (800) 947-3529" (from Newsletter #3 dated 10/2003).

WisDOT plans to include this or similar statements in future project mailings as well.

Similar statements were included in targeted mailings to two mobile home parks located in the project area. See Appendix E for copies of communications with the general public.

b) Indicate whether a minority population or a low income population, including the elderly and the disabled, is in the project's area of influence.

i) The requirements of EO 12898 are met if both "No" boxes are checked below

- ☐ No minority population in project's area of influence.
- ☐ No low income population in project's area of influence

ii) If either or both of the “Yes” boxes are checked, item c below must be completed

- ☒ Yes, a minority population is within the project’s area of influence
☒ Yes, a low income population is within project’s area of influence.

c) How was information on the proposed action communicated to the minority and/or low- income population(s)?
 Check all that apply.

- ☐ Advertising
☐ Brochures
☒ Newsletter
☒ Notices
☐ Utility Bill Stuffers
☐ E-mail
☐ Public Service Announcements
☒ Direct Mailing
☒ Key Persons: Landlord of Wolf’s mobile home park.
☒ Other (Identify):

The WisDOT project website contains a link to a web page devoted to environmental justice that contains links to contact persons in WisDOT, US DOT and FHWA.

A meeting was held with members of Wolf’s mobile home park on 8/26/2004.

d) Identify how input from the minority population and/or low-income population obtained? Check all that apply.

- ☐ Mailed Survey
☐ Door-to-door interview
☐ Focus Group Research
☒ Public Meeting
☒ Public Hearing
☒ Key Person Interview: Clerks of Towns, Wolf’s mobile home park owner
☒ Targeted Small Group Informational Meeting
☐ Targeted Workshop/Conference
☐ Other (Identify)

e) Indicate any special provisions made to encourage participation from the minority population and/or low-income population(s)

- ☒ **Interpreter:** A mailer sent to residents of a mobile home park along CTH N in Rock County included a Spanish Translation. Offers to assist were made in press releases and newsletters.
☐ Listening Aids
☒ Accessibility for Elderly and Disabled
☐ Transportation Provided
☐ Child Care Provided
☐ Sign Language
☒ Other (Identify) See text in the answer to question 1a, above.

2) Give a brief description of the minority population and/or low-income population affected by the proposed action. Include the size of the population(s) and their pertinent demographic characteristics. [A minority population means any readily identifiable group of minority persons including the elderly or disabled (see item 2 below for definitions of Title VI protected minorities) who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed program, policy, or activity. Low-Income Population means any readily identifiable group of low-income persons (having a household income at or below the U.S. Department of Health and Human Services poverty guidelines) who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed program, policy, or activity.]

☐ No minority populations or low-income populations are present in the areas influenced by the project (Process is complete if the No box is checked)

☒ Yes, a minority population or low-income population is located in the areas influenced by the project. Complete the remaining items on this Factor Sheet.)

3) Identify and give a brief description of the minority population or low-income population affected by the proposed action. Include the size of the population and their pertinent demographic characteristics. (Check all that apply.)

Although a review of census population data does not indicate any low income, disabled or minority populations, there are two mobile home parks that are within the study corridors for all alternatives. The mobile home parks were assumed to be low-income due to the nature of the housing. The mobile home park along Alternative 3 was assumed to include minorities based upon a windshield assessment, by the number of Hispanic names on the mobile home park address list and from public comment.

4) Identify and describe issues of concern or controversy to the minority population or low-income population.

☐ No issues of concern or controversy identified

☒ Issues of concern or controversy identified below- Describe issues and how they were resolved.

A letter was received from a member of the public regarding the mobile home park on CTH N, which is within the study corridor of Alternative 3. The commenter indicated that she felt it was largely Hispanic and was already negatively impacted by the US 12 Whitewater bypass, currently under construction. She called for full and fair participation of the lower income and minority communities.

WisDOT has begun to address this potential issue by sending a letter to the residents of this mobile home park. The letter was written in both Spanish and English and invited resident's input and participation. No responses have been received to date. Residents of this neighborhood will receive notice of future meetings and hearings on the project to encourage their participation. Alternative 3, along CTH N would not require acquisition of any mobile homes.

A meeting was held with residents of the mobile home park located on Twinkling Star Road. All Alternatives will potentially impact this neighborhood through the acquisition of mobile homes. No major issues of concern were expressed by the residents at the meeting. Residents of this neighborhood will receive notice of future meetings and hearings on the project to encourage their further participation.

5) Identify and describe effect(s) to the minority population or low-income population. Indicate which other environmental factors are involved or interrelated.

- | | | |
|---|---|---|
| <input type="checkbox"/> General Economics | <input checked="" type="checkbox"/> Community & Residential | <input type="checkbox"/> Economic Development & Business |
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Wetlands | <input type="checkbox"/> Streams & Floodplains |
| <input type="checkbox"/> Lakes & Other Open Water | <input type="checkbox"/> Upland | <input type="checkbox"/> Erosion Control |
| <input type="checkbox"/> Storm Water Management | <input type="checkbox"/> Air Quality | <input type="checkbox"/> Construction Stage Sound Quality |
| <input type="checkbox"/> Traffic Noise | <input type="checkbox"/> Section 4(f) & 6 (f) | <input type="checkbox"/> Historic Resources |
| <input type="checkbox"/> Archeological Resources | <input type="checkbox"/> Hazardous Substances and USTs | <input type="checkbox"/> Aesthetics |
| <input type="checkbox"/> Coastal Zone | | |

No disproportionate effects on minority or low income populations have been identified. As discussed in question 3, above, mobile homes would be acquired from a mobile home park on Twinkling Star Road.

6) Indicate whether effects to a minority population or a low-income population are beneficial or adverse

- ☐ Only beneficial effects will occur. Describe effects on affected population and discuss whether they are direct, indirect or cumulative, include a discussion of any measures to enhance beneficial effects.
- ☒ Identified adverse effects are proportionate to those experienced by the general population. Describe effects on affected population and discuss whether they are direct, indirect or cumulative, include a discussion of any measures to avoid, minimize, or mitigate adverse effects.

All Alternatives except Alternative 1 (no action) would require acquisition of mobile homes in the mobile home park on Twinkling Star Road. This is a direct impact. WisDOT held a meeting with this neighborhood and comments were received that the acquisition/relocation of their mobile homes would not be an undue hardship. WisDOT's relocation program will mitigate the effect to those affected by acquisitions.

☐ Identified effects are disproportionately high and adverse. *A disproportionately high and adverse effect means an adverse effect that: 1) is predominately borne by a minority population and/or a low-income population; or 2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.*

Describe disproportionately high and adverse effects on affected population and discuss whether they are direct, indirect or cumulative, include a discussion of any measures to avoid, minimize, or mitigate disproportionately high and adverse effects or enhance beneficial effects.

7) Indicate whether the individuals in the affected population(s) are protected under Title VI of the 1964 Civil Rights Act. (See item 2 above for definitions of Title VI minorities.)

- ☐ No Title VI protections do not apply, but other requirements under the Age Discrimination Act or Americans With Disabilities Act do apply. Describe effects and how they will be avoided, minimized or mitigated.
- ☐ Yes Title VI protections apply. Describe any special services, considerations, or mitigation that will be used to avoid, minimize, or mitigate effects to Title VI individuals.
- ☒ Not Applicable No Title VI populations would be impacted for any of the alternatives.

8) Will the project/alternative be carried out even with disproportionately high and adverse effects on a minority population or low-income population?

No disproportionate effects have been identified.

☐ No, the project/alternative will not be carried out in keeping with EO 12898

☐ There is no substantial need for the project/alternative

☐ Another alternative with less severe effects on the minority population or low-income population can meet the needs of this and is practical.

☐ Yes, will be carried out with the mitigation of disproportionately high and adverse effects.

☐ Yes, a substantial need for the project/alternative exists based on the overall public interest and alternatives that would have less adverse effects on minority populations or low-income populations have either:

☐ adverse social, economic, environmental, or human health impacts that are more severe; or

☐ would involve increased costs of an extraordinary magnitude

9) Identify and discuss mitigation and enhancement efforts to address disproportionately high and adverse effects to Title VI protected minority people if different from those shown in item 6 above.

Although the study corridors contain potentially affected communities that are likely low-income or minority, projected impacts associated with the need to relocate homes and businesses are not likely to fall disproportionately on members of any particular communities and are shared along the entire length of the corridor.

B. NATURAL ENVIRONMENT FACTORS

1. Wetlands Impact Evaluation Factor Sheet

1) Describe proposed work in the wetland(s), e.g., excavation, fill, marsh disposal, other.

Filling wetland areas generally results in one or more of the following impacts:

- It may affect wildlife that depend on wetland vegetation and permanent or temporary standing water for food, cover, and nesting;
- It may cause a change in ecosystem biodiversity and reduction in floral diversity by filling wetland edges;
- It may reduce sediment trapping and nutrient retention;
- It may reduce flood storage for wetlands adjacent to streams and drainage ways.

No Action, Alternative 1a

No work would be conducted in wetlands.

Alternative 2b

Work in wetlands associated with this alternative would consist of filling during the construction of the 4-lane divided facility along existing US 12, south of Fort Atkinson. The existing 2-lane facility already bisects the wetland areas and filling would be necessary to allow for roadway widening. A total of 2 acres of wetland are within the study corridor of this alternative.

Alternative 3

Work in wetlands associated with Alternative 3 would mainly consist of filling during the construction. Wetland impacts would occur due to widening the existing highway through wetlands already bisected by, or that lie adjacent to the existing highway. The existing 2-lane facility crosses wetland areas; filling would be necessary in these areas to allow for roadway widening. A total of 2 acres of wetland are within the study corridor of this alternative.

Alternative 7

This alternative calls for the construction of a new four-lane facility on new alignment; therefore, work in the wetlands would consist of excavation and filling. This alternative would cross a wetland complex located south of the City of Fort Atkinson. A total of 12 acres of wetland are within the study corridor of this alternative.

Alternative 7a

This alternative has been configured to avoid impacting wetlands associated with Allen Creek. It passes close to an area of springs contributing to the headwaters of Allen Creek, and providing groundwater flow to higher quality wetlands along the stream corridor. Further investigation of this area is needed. A small wetland area located at the south end of the project would be slightly impacted by the widening of existing US 12. A total of 2 acres of wetland are within the study corridor of this alternative.

2) Describe the location of wetland(s) affected by the proposal. Include wetland name(s), if available. (Use maps, sketches, or other graphic aids.)

Alternative 2b

Wetlands affected by Alternative 2b are shown in Figure 27 on page 120.

Alternative 3

The existing CTH N passes through a narrow wetland area between larger wetlands that are part of the Lima Marsh State Wildlife Area. See the wetland map for Alternative 3 in Figure 28 on page 121.

Alternative 7 and 7a

Wetlands affected by Alternatives 7 and 7a are shown in Figure 27 on page 120. Wetlands affected by these alternatives are located south of Hackbarth Road, west of US 12. Wetlands affected by Alternative 7 are associated with an unnamed drainage to Allen Creek but not Allen Creek itself. Alternative 7a could indirectly impact the Allen Creek wetlands upstream (south) of the roadway. DNR has indicated that further mapping of these wetlands is planned for summer 2005.

These wetlands are part of a larger complex associated with Allen Creek. This complex was identified in the late 1980's as a high quality wetland for protection consideration. NRCS has mapped wetlands on the Kreideman and Brandenburg farms as Prior Converted Wetlands, while other areas are mapped wetlands; these include wetlands found in the Southeast ¼ of the Southeast 1/4 of Section 15 and those found in the Northeast ¼ of Section 22. Some higher quality sedge meadow and cattail marsh occurs in this area as well.

DNR is interested in pursuing Natural Area designation or other means of protection for the entire wetland complex along Allen Creek. No formal action has occurred.

3) Is wetland contiguous or adjacent to a stream, lake or waterbody?

Alternative 2b: This wetland is contiguous (in contact) with an unnamed tributary of Galloway Creek.

Alternative 3: This wetland is associated with Lima Marsh which is associated with Otter Creek.

Alternative 7: wetland is adjacent to an unnamed ditched tributary to Allen Creek

Alternative 7a: This alternative crosses Allen Creek proper just west of CTH K and Allen Creek springs/wetlands nearby on Creamery Road.

4) List any observed or expected waterfowl and wildlife inhabiting or dependent upon the wetland. (List should include both permanent and seasonal residents).

Bird species observed within the project area corridor during site visits include wood thrush, common yellowthroat, sandhill cranes, and great blue herons. Based on observations of available habitat, it is expected that many other birds use the area, including green heron, yellow-headed blackbirds, marsh wren, snipe, American bittern, sora rail, Virginia rail, mallard, blue-winged teal, northern harrier, willow flycatcher, kingbird, sedge wren, and swamp sparrow. Some of these species are listed as Special Concern species in Wisconsin.

A DNR scientist observed many frogs in the area that included leopard frogs and possibly pickerel frogs. The scientist indicated that the observed habitat may support the State Threatened Blanding's Turtle found nearby. Sedge skippers (butterflies) were also observed by the DNR scientist.

Plant species found in the sedge meadow/shallow cattail marsh areas of the project area include but are not limited to: Arrowhead, Wiregrass Sedge, Bulrush, Vervain, Common false foxglove, Joe Pye weed, Swamp milkweed, Water smartweed, Pickerel Weed, Cattail, Meadowsweet, Steeple bush, Iris, Lobelia, and Water Plantain.

The DNR Scientist indicated that it is likely that a number of State Special Concern birds and butterflies may exist in the area, but additional survey would be needed for a definite determination.

Generally, wetland areas in southern Wisconsin serve as habitat for a variety of insects and animals, including butterflies, reptiles and amphibians, migratory waterfowl, songbirds, shorebirds and raptors as well as small mammals, common furbearers and deer. In the project area, the animals present may include some of those listed in Table 27.

Table 27: Wildlife Species Present in the Project Area

Birds		Mammals	Reptiles and Amphibians	Insects and Butterflies
Bittern	Red-winged Blackbird	Raccoon	Spring Peeper	Sedge Skipper
Sparrow	Sandhill Crane	Cottontail Rabbit	Bullfrog	Milkweed Beetle
Teal	Black Tern	Shrew	Water Snake	Dragonfly
Canada Goose	Rail	Vole	Painted Turtle	Damselfly
Mallard Duck	Snipe	Muskrat	Pickrel Frog	Viceroy Butterfly
Wood Duck	Woodpecker	Deer	Leopard Frog	Monarch Butterfly
Black Duck	Kingfisher		Blanding's Turtle	
Great Blue Heron	Barred Owl		Spotted Salamander	
Wren	Woodcock		Wood Frog	
Pie-billed Grebe	Warbler		Garter Snake	
Great Egret	Hawk		Snail	
Flycatcher	Thrush			

5) Are there any known endangered or threatened species affected by the project?
☐ No

☒ Yes Identify the species and indicate whether it is on Federal or State lists.

If endangered species were to be impacted, a permit from the USFWS would be required under Section 7 of the Endangered Species Act of 1973 (ESA). Further coordination and consultation with DNR and USFWS would occur if this alternative is selected. Avoidance and mitigation measures would be developed through the Section 7 process.

Alternative 2b

Least Darter and Pugnose minnow, both State Special Concern fish, occur in the Rock River and Galloway Creek. The Jade Clubtail dragonfly, a State Special Concern insect, occurs in the Rock River. The Redfin Shiner, a State Threatened species, and the Weed Shiner, a State Special Concern species, historically occurred in the Rock River and may still occur there.

Alternative 3

DNR has indicated that the State Threatened Blanding's Turtle is likely to occur in the wetland complex associated with the Lima Marsh State Wildlife Area and Lima Bog State Natural Area. DNR indicates that this area features a small bog lake surrounded by an extensive northern wet forest dominated by tamarack. Understory species include poison sumac, bog birch, winterberry, and willows. Sphagnum moss and typical bog species occur under the tamaracks near the lake. Bog species include: small cranberry, pitcher plant, round-leaved sundew, grass pink.

The Least Darter, a State Special Concern fish, and *Agabus gagates*, a State Special Concern beetle, both occur in Otter Creek. As stated in DNR-BER's October 24, 2003 letter, Livid Sedge and Common Bog Arrow-grass, State Special Concern Plants, historically occurred in the vicinity of CTH N.

Alternative 7

The Least Darter, a State Special Concern fish, occurs in Allen Creek. It is not known if the Least Darter occurs in the unnamed ditched tributary in the Alternative 7 corridor. As stated in #4, above, DNR has stated that additional survey would be necessary to determine if additional species of concern exist in the area.

Alternative 7a The Least Darter, a State Special Concern fish, occurs in Allen Creek.

☐ Section 7 coordination has been completed with the U.S. Fish & Wildlife Service. Describe mitigation required to protect the federally listed endangered species.

☒ Coordination with DNR has been completed. Describe mitigation required to protect the State listed species.

DNR has been consulted through all phases of the Draft Environmental Impact Statement study. DNR continues to assist WisDOT in determining potential impacts to State and Federally listed species.

6) FHWA Wetland Policy

Alternative 2b and 3

It is anticipated that the Statewide Wetland Finding would be required for these alternatives because approximately 2 acres of wetland would be affected. These alternatives are also on existing alignment. No significant concerns have been expressed over the proposed use of the wetlands for these alternatives. Future coordination with DNR and USACE would be completed before applying the Statewide Wetland Finding.

Alternatives 7 and 7a

These alternatives would be on new alignment and so would not meet the requirements for a Statewide Wetland Finding. It is anticipated that an Individual Wetland Finding would be required for these alternatives. Future coordination with DNR and USACE would be completed before applying the Individual Wetland Finding.

- ☐ **Not Applicable**
- ☐ **Individual Wetland Finding Required - Summarize why there are no practicable alternatives to the use of the wetland.**
- ☐ **Statewide Wetland Finding NOTE: All must be checked for the Statewide Wetland Finding to apply.**
- ☐ Project is either a bridge replacement or other reconstruction within 0.5 km (0.3 mile) of the existing location.
 - ☐ The project requires the use of 3 hectares (7.4 acres) or less of wetlands.
 - ☐ The project has been coordinated with the DNR and there have been no significant concerns expressed over the proposed use of the wetlands.

7) Erosion control or stormwater management measures that will be used to protect the wetland are shown on both the Erosion Factor Sheet and the Stormwater Factor Sheet:

- ☐ Yes ☒ No - Briefly describe measures to be used

Erosion Control and Storm Water Best Management Practices (BMPs) would be used on all alternatives.

8) Section 404 Permit

Coordination with the Army Corps of Engineers will occur and applicability of a Section 404 Permit will be determined for the preferred alternative. It is expected that the following types of permits would be required for each alternative.

Alternative 2 Provisional General Permit (GP) (2 acres)

Alternative 3 Provisional General Permit (GP) (2 acres)

Alternative 7 Individual Section 404 Permit (12 acres)

Alternative 7a Provisional General Permit (GP) (2 acres)

9) Section 10 Waters

The study area does not contain Section 10 waters.

10) Identify wetland type(s) that will be filled or converted to another use. Use the DOT Wetland Bank System. (See FDM Procedure 24-5-10, Figure 2.) If the National Wetlands Inventory (NWI) or Wisconsin Wetlands Inventory (WWI) are used to identify the types of wetlands, translate them to the DOT Wetland Bank System.

See Figure 27 and Figure 28 on pages 120 and 121 for maps of the wetlands. Map numbers below correlate to these maps.

Table 28: Summary of Potential Wetland Impacts

Alternative	Wetland Type*	Wetland Functional Value	Affected Wetland Acreage	Est. Total Wetland Size	Wetland Location	Map Area #
Alternative 2b	SS, RPE	Low	2 acres	14 and 60 acres	Along existing US 12, south of Fort Atkinson. Existing roadway bisects wetland area B and is adjacent to wetland area C.	B and C
Alternative 3	RPF and RPE	Medium	2 acres	796 acres	Along existing CTH N – narrow wetland between larger wetlands that are part of the Lima Marsh State Wildlife Area.	D
Alternative 7	RPF, RPE, M, SM	High	12 acres	133 and 60 acres	South of Hackbarth Road, west of US 12. Wetlands are adjacent to (within 5-year floodplain of) Allen Creek and adjacent to wetland area C	A and C
Alternative 7a	RPF and RPE	Potential indirect impact to high functional value Allen Creek headwaters, springs, and/or wetlands.	2 acres	60 acres	Along existing US 12, south of Fort Atkinson. Existing roadway is adjacent to wetland area C.	C

***Wetland Types**

RPF Wooded Riparian Wetland
RPE Emergent Riparian Wetland
M Meadow
SM Shallow Marsh

11) Wetland Mitigation (NOTE: Avoidance, minimization, or mitigation is required.)

a) Wetland Avoidance

i) Describe methods used to avoid the use of wetlands, such as using a lower level of improvement or placing the roadway on new location, etc.

The alternative alignments have been designed to avoid the maximum amount of wetlands. Alternative 7 was modified to avoid the high quality wetland complex along Allen Creek. Total avoidance of the wetlands is unlikely as relocation of the roadway would take the roadway severely off alignment. During final design, efforts would be made to further avoid or minimize impacts.

ii) Indicate the total area of wetlands avoided

This would be determined for the preferred alternative if that alternative impacts wetlands.

b) Minimize the amount of wetlands affected**i) Describe methods used to minimize the use of wetlands, such as a steep up of side slopes or use of retaining walls, equalizer pipes, upland disposal of hydric soils, etc.**

The study corridor of 400 feet on the four-lane alternatives and 200 feet on the two-lane Alternative 3, allows for adjustments to minimize the amount of wetlands affected during final design. Other means of avoidance could include bridging the wetland. Methods to minimize the amount of wetlands affected would be developed using usual WisDOT practices and through consultation with the DNR, USFWS (as applicable) and USACE (through the Section 404 permit).

ii) Indicate the total area of wetlands saved through minimization

This would be determined for the preferred alternative if that alternative impacts wetlands.

c) Compensation for unavoidable loss

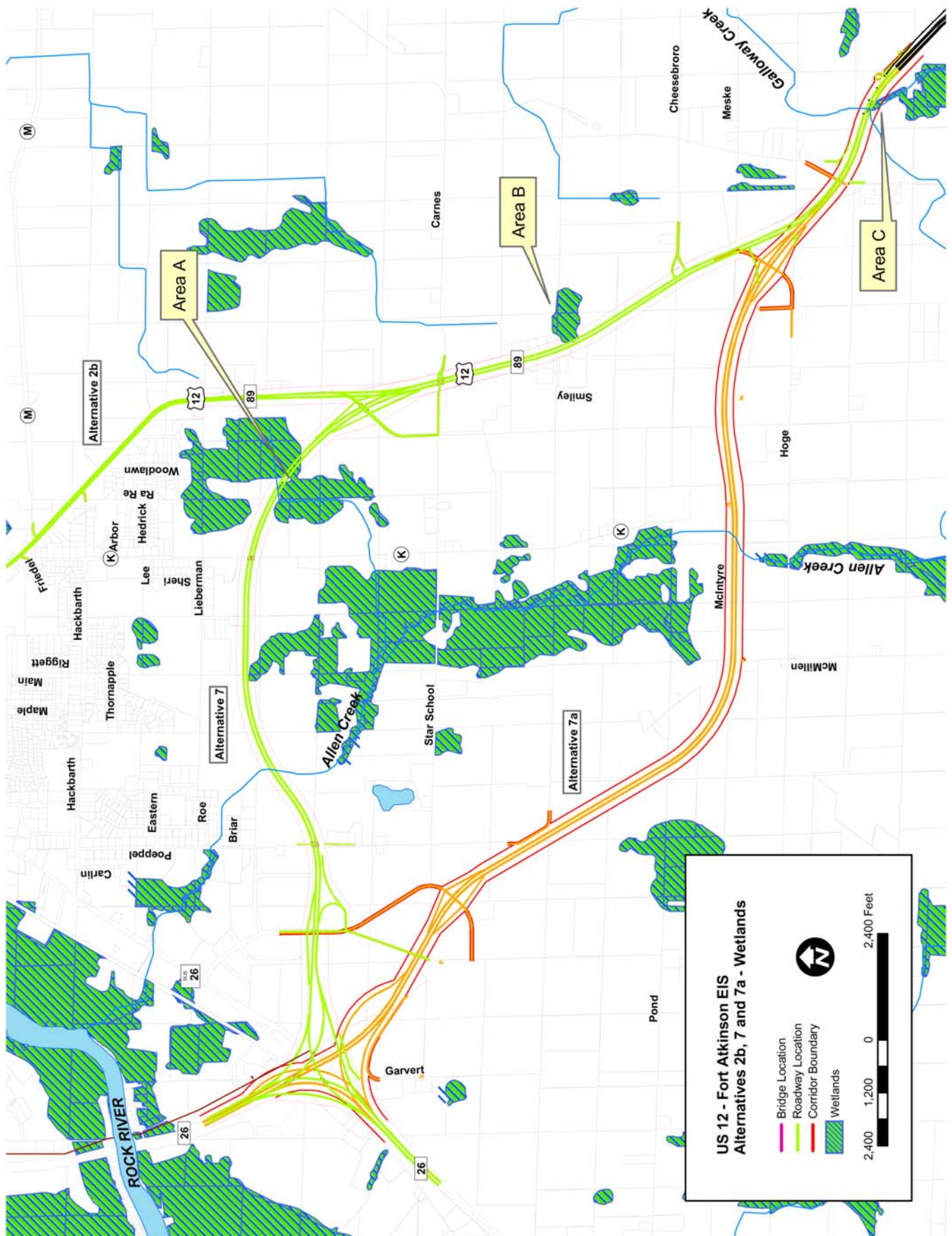
The following items would be determined in consultation with the DNR and USACE when a preferred alternative that impacts wetlands is selected. WisDOT is currently developing the London Wetland Mitigation Bank site in Jefferson County. It is a possibility that if compensation is required, this new bank site could be utilized.

i) Is compensation of unavoidable wetland loss required?

This would be determined for the preferred alternative if that alternative impacts wetlands.

ii) Describe efforts to replace unavoidable wetland loss.

This would be determined for the preferred alternative if that alternative impacts wetlands.



Sources: HNTB Corporation, Jefferson County



Source: HNTB Corporation, Rock County

2. Streams and Floodplains Impact Evaluation Factor Sheet

1) If water quality data is available, include this information (e.g. DNR or local discharger might have such records).

Creeks are illustrated on the wetland maps in Figure 27 and Figure 28 on pages 120 and 121.

Table 29: Characteristics of Potentially Affected Streams

	Alternative 2b	Alternative 3	Alternatives 7 and 7a
Name of Stream	Galloway Creek	Unnamed streams tributaries to Galloway Creek	Allen Creek, Galloway Creek
Location of Stream	Galloway exists along existing US 12	1. Sections 1 and 12, T4N R14E 2. Sections 6 and 7 of T4N R15E	Allen Creek would be crossed by new structure near Creamery Road, Galloway exists along existing US 12
Stream Type, Indicate Stream Class if known (Warm water Trout-Class, Wild and Scenic River)	Galloway Creek is a warm water fishery	Warm water streams	Allen Creek is designated an Exceptional Resource Water Galloway Creek is a warm water fishery
Size of Upstream Watershed	Each alternative is located within the Lower Koshkonong Creek Watershed, which covers an area of approximately 265 square miles, or 170,000 acres in Dane, Rock, Jefferson, and Walworth Counties.		
Permanent or Temporary Flow?	Permanent	Permanent	Permanent
Stream Characteristics (Substrate, Sand, Silt, Clay, Cobbles, or Other)	Silt and sand bottom	Silt and sand bottom	Silt and sand bottom
Average Water Depth	2 feet	2 feet	2 feet
Vegetation in Stream? Describe	Wetland vegetation on fringes of stream	Riparian wetland vegetation.	Wetland vegetation on fringes of stream
Fish Species Present	Warm water species	Warmwater species	Least Darter, Pugnose minnow, and other warm water species
Are there any known endangered or threatened species affected by the project?	Yes, Coordination with USFWS and DNR would occur and mitigation measures agreed upon before the FEIS is issued.	None known	Yes, Coordination with USFWS and DNR would occur and mitigation measures agreed upon before the FEIS is issued.

Allen Creek is identified as an Exceptional Resource Water under Chapter NR 102 of the Wisconsin Administrative Code. The Least Darter is a State Special Concern fish that is known to occur in Allen Creek as of 2003. Least Darter and Pugnose minnow, both Special Concern fish, occur in Galloway Creek.

2) If bridge replacement, are migratory bird nests present?

- ☐ No
☒ Unknown
☐ Yes – Identify Bird Species present: Estimated number of nests is:

The Migratory Bird Treaty Act of 1918 states that, unless permitted by regulations, it is unlawful to kill or capture migratory birds, or to destroy their eggs and nests. Migratory cliff swallows, barn swallows and eastern phoebes may nest on bridges located on the existing US 12 (Alternatives 2b, 7, and 7a) or CTH N (Alternative 3). The Law enforcement branch of the U.S. Fish & Wildlife Service will permit the destruction of inactive nests of swallows and the eastern phoebe during the non-nesting season. Highway and bridge work may proceed during the nesting

season if a depredation permit has been obtained from U.S. Fish & Wildlife Service or nesting on the affected site has been successfully prevented.

Any of the alternatives that would require changes to bridges would not be completed for several years. Inspection of bridges will occur closer to the time of construction. Mitigation measures followed if migratory bird nests are found on structures within the project corridor would likely include the following:

- Demolition of existing structure(s), if needed, would occur outside of the species' nesting season.
- Nests would be removed before the nesting season, or other means would be implemented to prevent nesting such as placement of netting on the existing structure prior to the nesting season.

3) Is a U.S. Fish & Wildlife Depredation Permit required to remove migratory bird nests?

A U.S. Fish and Wildlife Depredation Permit would be required to remove migratory bird nests if any demolition of structures would take place during the nesting season and mitigation measures noted in question 2, above cannot be accomplished.

4) Describe land adjacent to stream. If wetland, give type.

Alternative 2b Land adjacent to the Rock River is occupied by parkland in the area adjacent to the Rock River Bridge. The land use is otherwise exclusively urban.

Alternative 3 The existing CTH N passes through a narrow wetland area between larger wetlands that are part of the Lima Marsh State Wildlife Area. The area is surrounded mainly by the wildlife area, as well as agricultural lands.

Alternative 7 The land adjacent to Galloway Creek is mainly occupied by agricultural lands and riparian wetlands. A large wetland complex is associated with Allen Creek. These wetlands are comprised of sedge meadows and shrub wetlands and are of high quality.²²

Alternative 7a The land adjacent to Allen Creek is occupied by riparian wetland vegetation, wooded upland and agricultural fields.

5) Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site.

No dischargers are located within 0.8 kilometers (1/2 mile) of any alternatives.

6) Section 404 Permit

Coordination with the Army Corps of Engineers will occur and applicability of a Section 404 Permit will be determined for the preferred alternative. It is expected that the following types of permits would be required for each alternative.

Alternative 2 Provisional General Permit (GP) (2 acres)

Alternative 3 Provisional General Permit (GP) (2 acres)

Alternative 7 Individual Section 404 Permit (12 acres)

Alternative 7a Provisional General Permit (GP) (2 acres)

7) Section 10 Waters

²² This assessment is based on observations made on site visits conducted by DNR and WisDOT's consultant in the Spring of 2004 and in late August 2004.

For navigable waters of the United States (Section 10) indicate whether the U.S. Coast Guard has been notified?

Not Applicable

☐ No

☐ Yes - Describe results of Notification:

Identify which Nationwide Section 404 Permit is required:

Indicate whether Preconstruction Notification (PCN) to the U.S. Corps of Engineers (USACE) is:

☐ Required

☐ Was Submitted on: (Date)

Status of PCN:

USACE has made the following determination on: (Date):

USACE is in the process of review, anticipated date of determination is: (Date)

8) Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment. (Note: U.S. Coast Guard must be notified when Section 10 waters are affected by a proposal)

Alternative 2b 2.6 acres of the study corridor is within a wetland on Galloway Creek. See map on page 120, Area C. Work required would likely include a new culvert or the extension of the existing culvert at Galloway Creek.

Alternative 3 Floodplain covers 0.8 acres of the study corridor at the unnamed stream on page 121, Area D. This would be a longitudinal encroachment. The floodplain currently encroaches upon CTH N at this location. Work could include a culvert at this location, however that is yet undetermined.

Alternative 7 Floodplain covers 24.4 acres within the study corridor where the alignment would cross Allen Creek and at the wetlands shown at Area A on page 120. Both encroachments would be a crossing. Work would likely include a new bridge over Allen Creek and perhaps another bridge over wetland Area A. This alternative would also cross Galloway Creek and associated wetlands at wetland Area C of the map on page 120. The design of this alternative would need to be developed in consultation with DNR and USACE to determine what kind of mitigation and avoidance would be feasible within the wetlands.

Alternative 7a Floodplain covers 4.4 acres within the study corridor where the alignment would cross Allen Creek near Creamery Road (see map on page 120). This would be a crossing and would likely require a new bridge. Currently the creek is crossed by Creamery Road.

9) Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be consistent with NR 116, the National Flood Insurance Program, and Governor's Executive Order #73.

The alternatives are not at a design stage advanced enough to determine the effects to backwater. This determination will be completed for the preferred alternative and will be consistent with NR 116, Wisconsin's Floodplain Management Program.

10) Describe and provide the results of coordination with any floodplain zoning authority.

FEMA maps were checked to determine location, amount and type of floodplain encroachments that would be likely. Further coordination and determination would be completed for the preferred alternative, if necessary.

11) Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?
--

The alternatives are not at a design stage advanced enough to determine changes in the design flood, or backwater impacts. This determination would be completed for the preferred alternative before the FEIS is issued.

No impacts would occur

- ☐ Significant interruption or termination of emergency vehicle service or a community's only evacuation route
- ☐ Significant flooding with a potential for property loss and a hazard to life
- ☐ Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

12) Discuss existing or planned floodplain use and briefly summarize the project's effects on that use.
--

Alternative 1 and 1a In the urban developed portion of the study area, within Fort Atkinson, the floodplain is confined to the Rock River and immediately adjacent. Uses include urban uses as well as the park areas along the Rock River. The alternatives are not at a design stage advanced enough to determine effects on the floodplain. This determination would be completed for the preferred alternative.

Alternative 2b Alternative 2b would be similar to Alternative 1 and 1a, within the Fort Atkinson area. In the rural areas land use includes mainly agriculture and rural residential yards. Some woodland and wetland areas are also located within the floodplain. Floodplain also covers portions of existing roadways.

Alternative 3 The floodplain occurs in one location on rural residential/agricultural lands, and extends onto the roadway of CTH N.

Alternative 7 and 7a Agricultural, wetland, woodland and roadways are currently located within the floodplain areas of the study corridors.

The project is expected to increase impervious area within floodplains. Floodwaters could be displaced to adjacent lands. The WisDOT-DNR Cooperative Agreement specifies that WisDOT will provide the DNR and local units of government with criteria used in the design and placement of structures regarding the regional flood.

13) Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream.

Jefferson County has 13 watersheds, 12 of which eventually drain to the Rock River. As stated in the Jefferson County Land and Water Resource Management Plan, the entire segment of Allen Creek in Jefferson County has been designated as an Exceptional Resource Water. The least darter, a species on the state's special concern list, is found in Allen Creek. Northern pike spawning habitat is found in wetlands adjacent to the stream and the Rock River. However, sediment loads are increasing due to ditching of tributaries, polluted runoff from stream bank pasturing, and steep slopes. Road salt runoff also affects the creek by decreasing water quality. Salt is very water soluble and so excess sodium and chloride is easily transported into ground water.

Highway construction has a potential for affecting water quality due to erosion, sedimentation, and stormwater runoff. Implementing recommended highway improvements has the potential for impacting water quality over time. Widening the existing US 12 may require replacing or extending existing structures, while constructing a new roadway may require construction of new structure(s).

Outstanding Resource Waters are defined as having excellent water quality and high-quality fisheries. They do not receive wastewater discharges, and point source discharges will not be allowed in the future unless the quality of the discharge meets or exceeds the quality of the receiving water. Currently, there are no Outstanding Resource Waters designated in Jefferson County.

14) Describe proposed measures to minimize adverse effects or to enhance beneficial effects.

Erosion control measures, erosion control implementation plans, and stormwater management measures would aid in minimizing water quality impacts. The project will require Section 401 Water Quality Certification from the Wisconsin DNR and a Section 404 permit where impacts to wetlands are greater than 2 acres.

15) Erosion control or stormwater management measures which will be used to protect the stream are shown on The Erosion Control Factor Sheet and the Stormwater Management Factor Sheet:

☐ Yes

☒ No Briefly describe measures to be used such as sheet piling, cofferdam, turbidity barrier, barges, construction blackout window, etc.

Erosion control and stormwater best management practices (BMPs) will be used on all alternatives.

3. Upland Habitat Impact Evaluation Factor Sheet

1) Give a brief description of the upland habitat area. Include prominent plant communities at the project site (list vegetation with an estimate of each community type if more than one present).

Upland habitat occurs in environmental corridors, isolated natural areas, and other tracts of land that have forested or grassland cover. Wooded areas are scattered throughout the project area. Land in agricultural use that includes forested edges, open fields, and fencerows provides important wildlife habitat.

2) Identify and describe any observed or expected wildlife associations with the plant communities.

Based on initial field review of each corridor, DNR and WisDOT's consultant observed habitat areas for whitetail deer, several smaller fur-bearing mammals, and several upland bird species. More detailed study would be necessary to further define wildlife habitat located in the vicinity of each alternative.

Alternative 7a passes through a land area where a grassland bird association is anticipated to exist.

3) Identify the dominant plant community(ies) and estimate existing and proposed area of each dominant plant community to be altered.

Wisconsin DNR's WebView website identifies the land type as the Dane-Jefferson Drumlins and Lakes. The area is described therein as an undulating complex of till plains with drumlins, outwash plains, lake plains and muck deposits common. Soils are predominantly well drained silt and loam over calcareous sandy loam till, loamy lacustrine or gravelly sandy outwash.

The lands are primarily in agricultural production or urban development. In addition to the large wetland complex associated with Allen Creek there are other habitat types scattered throughout the area including grasslands, broad-leaved deciduous forests, and small amounts of shrublands and coniferous forests.

Alternative 3

Camp Wakowpa Forest is a southern dry-mesic woods dominated by white oak associated with bur oak, shagbark hickory and black cherry that occur south of CTH N near Otter Creek. This area would not likely be substantially altered.

Alternative 7a

As indicated by DNR, scattered large oak trees occur, indicating the potential for remnant former oak savannah habitat to exist.

4) Are there any known endangered or threatened species affected by the project?

- ☐ No
☒ Yes. Identify the species and indicate whether it is on Federal or State lists.

- ☐ Section 7 coordination has been completed with the U.S. Fish & Wildlife Service. Describe mitigation required to protect the federally listed endangered species.
- ☐ Coordination with DNR has been completed. Describe mitigation required to protect the State listed species.

Alternative 2b

DNR indicated that Giant Yellow Hyssop, a plant listed as Threatened in Wisconsin, was historically found at locations along this alternative. The species prefers woodlands and forest edges, thickets, and river margins. There are 11 acres of woodlands within the potential right-of-way.

Coordination with DNR would be completed in a future engineering phase if Alternative 2b is selected.

5) Describe the nature of proposed work in the upland habitat area (e.g., grading, clearing, grubbing, etc.).
Alternatives 2b

Work commonly associated with roadway widening includes clearing, grubbing, excavation, grading, etc. These activities would be required when reconstructing the existing 2-lane facility into a 4-lane facility.

Alternative 3

Work in the upland habitat would be that commonly associated with roadway widening – clearing, grubbing, excavation, grading. These activities would be required for clearing the areas adjacent to the highway that would be designated a clear zone.

Alternatives 7 and 7a

The proposed work consists of those activities associated with construction of a new roadway: clearing, grubbing, grading, excavation, etc.

6) Identify and describe any known wildlife or waterfowl use areas or movement corridors that would be severed or eliminated by the proposed action. Include a discussion of the proposed action's effects upon the areas or corridors.
Alternative 2b

The US 12 roadway currently interrupts animal movement. The primary impact associated with the loss of upland plant communities is loss of wildlife habitat that serves as movement corridors and provides cover for breeding, foraging, and resting. Other wildlife impacts caused by removing vegetation include interrupting the natural succession to mature, climax communities; increasing the potential for soil erosion; and reducing aesthetic values.

Alternative 3

CTH N is an existing interruption in the natural turtle crossing where the roadway crosses the DNR lands associated with the Lima Marsh Natural Wildlife Area.

Alternative 7 and 7a

The proposed alternative would include construction of a new roadway through a mainly agricultural and wooded area. This construction may cause severance of movement corridors, as well as disruption of natural areas. Based upon comments from the public, turtles may migrate between an isolated wetland south of the Alternative 7a alignment to the Allen Creek Wetlands north of the alignment. Alternative 7a would create a barrier to that migration. A wildlife crossing may be warranted if this is the case.

7) Discuss other direct impacts on wildlife and estimate significance.
Alternative 2b

If Alternative 2b is selected, improvements would occur adjacent to the highway and upland impacts would be strip or edge acquisitions. New woodland edges created by highway right-of-way may experience tree loss from the drying effects of wind, sun, and exposure to road runoff.

Alternative 3

If this alternative is selected, improvements would occur adjacent to the highway and upland impacts would be strip or edge acquisitions. New woodland edges created by highway right-of-way may experience tree loss from the drying effects of wind, sun, and exposure to road runoff.

There are two properties along CTH N that would be impacted by Alternative 3 that are currently in the Managed Forest Law Land program.²³ One site has 31 acres set aside and the project's study area encroaches upon 1.5 acres. The second site has 30 acres set aside and the study area encroaches upon 1 acre.

²³ The purpose of the Managed Forest Law is to encourage the management of private forest lands for the production of future forest crops for commercial use through sound forestry practices, recognizing the objectives of individual property owners, compatible recreational uses, watershed protection, and development of wildlife habitat and accessibility of private property to the public for recreational purposes.

Alternative 7 and 7a

The primary impact associated with the loss of upland plant communities is loss of wildlife habitat that serves as movement corridors and provides cover for breeding, foraging, and resting. Other wildlife impacts caused by removing vegetation include interrupting the natural succession to mature, ecological communities; increasing the potential for soil erosion; and reducing aesthetic values. Wildlife species affected by the bypass alternatives would consist primarily of deer, pheasants, and other game species characteristic of the agricultural landscape. As noted in question 6, turtles and other species that may migrate between wetlands would be affected.

Construction of this alternative would increase upland impacts in comparison to Alternatives 2b and 3, due to tree loss and land disturbance for construction of the new roadway. Construction of this alternative may potentially lead to the interruption of animal movements. Available hunting land would be reduced due to the setback regulations for hunting near a roadway. This may result in decreased game management, affecting the overall population and health of particular game species.

There is one affected property that is participating in the Managed Forest Law program. About 0.5 acres of the land under contract is within the study corridor for Alternative 7a.

C. PHYSICAL ENVIRONMENT FACTORS

1. Air Quality Impact Evaluation Factor Sheet

1) Carbon Monoxide: Is this project exempt from air quality analysis under Wisconsin Administrative Code - NR 411?

- ☐ No - NR 411 exemptions do not apply
☒ Yes - NR 411 exemption(s) apply - Identify exemption(s) and explain why project is exempt.

This project is located outside the metropolitan counties of Wisconsin.

Alternative 2b

Within the City of Fort Atkinson, the modified road one-way pair would have only one additional lane, which is less than the two additional lane threshold.

The maximum peak hour traffic increase is 1,260 vehicles, which is less than the 1,800 vehicles/hour threshold.

Within the City of Fort Atkinson, the maximum shift in the nearest roadway edge toward any potential receptor location within the new intersection boundary is 6 feet (1.8 meters), which is less than the 12 foot (3.7 meter) threshold.

In the areas where the maximum shift in roadway is more than 12 feet (3.7 meters), there are no more than two approach lanes, there are no receptors within 25 feet (7.6 meters), and peak hour approach volumes are less than the 1,800 vehicle per hour threshold.

Alternative 3

The maximum peak hour increase is 955 vehicles per hour which below the 1,800 vehicles per hour threshold.

Alternative 7

The maximum peak hour increase is 1,732 which is less than 1,800 vehicles per hour threshold.

In the areas where the maximum shift in roadway is more than 12 feet, there are no more than 2 approach lanes, there are no receptors within 25 feet and peak hour approach volumes are less than the 1,800 vehicle per hour threshold.

Alternative 7a

The maximum peak hour traffic increase is 1,732 vehicles, which is less than the 1,800 vehicles per hour threshold.

In the areas where the maximum shift in roadway is more than 12 feet (3.7 meters), there are no more than two approach lanes, there are no receptors within 25 feet (7.6 meters), and peak hour approach volumes are less than the 1,800 vehicle per hour threshold.

2) An air quality analysis was required.

- ☒ No
☐ Yes - Identify the air quality modeling technique or program used to perform the analysis. (Attach Carbon Monoxide Worksheet to this Factor Sheet to illustrate results.)

3) If an air quality analysis was performed, will a Construction Permit be required to address air quality before the project may proceed?

- ☒ No
☐ Letter of concurrence from DNR Bureau of Air Management requested.
☐ Letter of concurrence received from DNR Bureau of Air Management.
☐ Yes - Indicate: Date permit requested OR Date of Permit

4) Ozone: Is the project located in a county that is designated non-attainment or maintenance for ozone?

- ☒ No

2. Construction Stage Sound Quality Impact Evaluation Factor Sheet

1) Identify and describe residences, schools, libraries, or other noise sensitive areas near the proposed action and which will be in use during construction of the proposed action. Include the number of persons potentially affected.

Alternative 2b

There are two (2) churches, one (1) school, two (2) commercial properties, and eighty one (81) residences abutting the proposed roadway improvement for Alternative 2B.

Alternative 3

There are six (6) residences abutting the proposed roadway improvement for Alternative 3.

Alternative 7

There are two (2) residences, and one (1) commercial property abutting the proposed roadway improvement for Alternative 7.

Alternative 7a

There are three (3) residences abutting the proposed roadway improvement for Alternative 7A.

Existing noise in the rural areas includes farm equipment and machinery, and building mechanical noise, as well as existing traffic on area roadways. Noise in the urban areas includes urban traffic and noise from industrial operations and building mechanicals.

The bypass alternatives in the rural areas would not impact as large a number of residences and noise sensitive uses because they would be largely in undeveloped areas.

2) Describe the types of construction equipment to be used on the project. Discuss the expected severity of noise levels including the frequency and duration of any anticipated high noise levels.

The noise generated by construction equipment would vary greatly, depending on equipment type/model/make, duration of operation and specific type of work effort. Typical noise levels may occur in the 67 to 107 dBA range at a distance of 50 feet (15.2 meters).

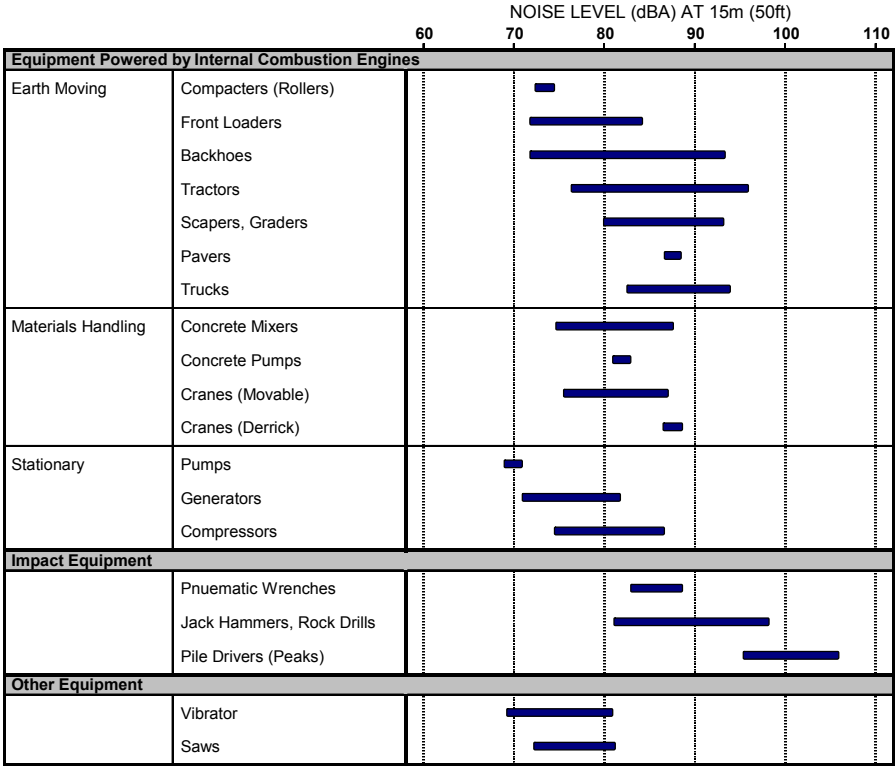
Figure 29 on page 132 shows typical noise levels for a variety of construction equipment. Adverse effects related to construction noise are anticipated to be of a localized, temporary, and transient nature.

For Alternatives 2b and 3, minimal construction is expected. Anticipated noise would be localized and of short duration. Alternative 7 and 7a would have greater noise levels because the extent of construction would be much greater as a new roadway, bridges and interchanges would be built.

3) Describe the construction-stage noise abatement measures to minimize identified adverse noise effects.

To reduce the potential impact of construction noise, the special provisions for this project would require that motorized equipment be operated in compliance with all applicable local, state, and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site. At a minimum, the standard specifications would require that motorized construction equipment not be operated between 10:00 PM and 6:00 AM without the prior written approval of the project engineer. All motorized construction equipment would be required to have mufflers constructed in accordance with the equipment manufacturer's specifications or a system of equivalent noise reducing capacity. It would also be required that mufflers and exhaust systems be maintained in good working condition, free from leaks and holes.

Figure 29: Typical Construction Equipment Noise



SOURCE: U.S. Report to the President and Congress on Noise, February, 1972.

3. Traffic Noise Impact Evaluation Factor Sheet

Need for Noise Analysis

1) Based upon a consideration of the traffic, roadway, terrain, and receiver characteristics affecting sound levels, could there be an increased traffic sound level as a result of this action?

- ☐ No - Complete only the Construction Noise Factor Sheet.
☒ Yes – Complete the Construction Noise Factor Sheet and the rest this Factor Sheet.

Traffic Data

2) Indicate whether traffic volumes for sound prediction are different from the Design Hourly Volume (DHV) on the Traffic Summary Basic Sheet.

- ☒ No
☐ Yes - Indicate volumes and explain why they were used.

3) Identify and describe the noise analysis technique or program used to identify existing and future sound levels. (See attached receptor location map.)

Aerial photos of the entire study area along with lists of public buildings were reviewed to select 31 representative noise receptors. Receptor locations are identified on the maps located in Appendix I. The Federal Highway Administration (FHWA) traffic Noise Model, V 2.1 (TNM®) was used to model existing (2003) peak hour noise levels at 27 of these locations where existing traffic was the primary source of noise. Existing Leq noise levels were measured at 6 noise receptors on June 3, 2004. Measurements at 2 of the sites were used to establish existing Leq noise levels at 4 receptors adjacent to Alternatives 7 and 7A.

The Federal Highway Administration (FHWA) traffic Noise Model, V 2.1 (TNM®) was also used to model future design year (2030) peak hour Leq noise levels at all 31 noise receptors.

4) Identify sensitive receptors, e.g., schools, libraries, hospitals, residences, etc. potentially affected by traffic noise.

The results of the TNM analysis are presented in Table 30 through Table 33 on pages 136 - 142.

Alternative 2b (86 total receptors)

The noise levels developed with TNM indicate that 2 churches, 1 school, 2 commercial properties, and 81 residences would be exposed to Leq noise levels that approach or exceed the criteria presented in TRANS 405.

Alternative 3 (62 total receptors)

The noise levels developed with TNM indicate that 1 church, 1 school and 60 residences would be exposed to Leq noise levels that approach or exceed the criteria presented in TRANS 405.

Alternative 7 (15 total receptors)

The noise levels developed with TNM indicate that 12 residences would be exposed to Leq noise levels that approach or exceed the criteria and 2 residences and 1 commercial property would be exposed to an increase in sound levels of 15 dBA or more as presented in TRANS 405.

Alternative 7a (15 total receptors)

The noise levels developed with TNM indicate that 12 residences would be exposed to Leq noise levels that approach or exceed the criteria and 3 residences would be exposed to an increase in sound levels of 15 dBA or more as presented in TRANS 405.

5) If this proposal is implemented will future sound levels produce a noise impact?

☐ No

☒ Yes the impact will occur because:

☒ The Noise Abatement Criteria (NAC) is approached (1 dBA less than the NAC) or exceeded.

☐ Existing sound levels will increase by 15 dBA or more.

See Table 30 through Table 33 on pages 136 - 142. Noise impacts are also summarized in the impact summary table on 59.

6) Will traffic noise abatement measures be implemented?

☐ Not Applicable - Traffic noise impacts will not occur.

☒ No - Traffic noise abatement is not reasonable or feasible (explain why). In areas currently undeveloped, local units of government are to be notified of predicted noise levels for land use planning purposes. **(A COPY OF THIS WRITTEN NOTIFICATION SHALL BE INCLUDED WITH THE FINAL EIS.)**

☐ Yes - Describe any traffic noise abatement measures that will be implemented.

Various methods were reviewed to mitigate the noise impact of the proposed project. Among these were vertical and horizontal alignment shifts, restriction of truck traffic to specific times of the day, a total prohibition of truck traffic, the use of berms and the use of sound barriers.

Based on the study completed, mitigation of noise impacts for the alternatives is not reasonable.

Alternative 2b

Shifts in the alignment are not practical because of limited right-of-way and the need to terminate the project at specific intersections. Prohibition of truck traffic is not feasible for this project. Limited right-of-way would not permit the construction of berms. Noise barriers, to be effective, must be solid with no gaps. Along the project, there are 86 receptors that would be exposed to design hour noise levels that approach or exceed 67 dBA Leq. All of these receptors have access to US 12 prohibiting the construction of effective noise barriers.

The 66 dBA Leq setback distance along the proposed Alternative 2b is as follows for the following segments from south to north:

Between the southern terminus and the point where the median is introduced:	115 feet
Between the point where the median is discontinued to County M:	135 feet
Between County M and Rockwell Avenue:	95 feet

The setback distance indicates that noise levels within this distance, measured perpendicular to the centerline in either direction, is 66 dBA Leq or greater. This setback distance was developed to assist local planning authorities in developing land use control over the remaining undeveloped lands along the project in order to prevent further development of incompatible land use.

Alternative 3

Shifts in the alignment are not practical because of limited right-of-way and the need to terminate the project at specific intersections. Prohibition of truck traffic is not feasible for this project. Limited right-of-way would not permit the construction of berms. Noise barriers, to be effective, must be solid with no gaps. Along the project, there are 62 receptors that would be exposed to design hour noise levels that approach or exceed 67 dBA Leq. All of these residences have access to the proposed project prohibiting the construction of effective noise barriers.

The 66 dBA Leq setback distance along the proposed Alternative 3 would be 90 feet. The setback distance indicates that noise levels within this distance, measured perpendicular to the centerline in either direction, is 66 dBA Leq or greater. This setback distance was developed to assist local planning authorities in developing land use control over the remaining undeveloped lands along the project in order to prevent further development of incompatible land use.

Alternative 7

Shifts in the alignment are not practical because of limited right-of-way and the need to terminate the project at specific intersections. Prohibition of truck traffic is not feasible for this project. Limited right-of-way would not permit the construction of berms. Noise barriers, to be effective, must be solid with no gaps. Along the existing section of US 12 there are 15 receptors that would be exposed to design hour noise levels that approach or exceed 67 dBA Leq. These 15 properties have access to US 12 prohibiting the construction of effective noise barriers. Along the new alignment section there are two (2) residences and one (1) commercial property that would be exposed to an increase of 15 dBA or more over existing. It is infeasible to construct a noise barrier for scattered individual properties that meets the cost criteria established in TRANS 405.

The 66 dBA Leq setback distance along the proposed Alternative 7 would be 100 feet west of Commerce Parkway and 90 feet east of Commerce Parkway. The setback distance indicates that noise levels within this distance, measured perpendicular to the centerline in either direction, is 66 dBA Leq or greater. This setback distance was developed to assist local planning authorities in developing land use control over the remaining undeveloped lands along the project in order to prevent further development of incompatible land use.

Alternative 7a

Shifts in the alignment are not practical because of limited right-of-way and the need to terminate the project at specific intersections. Prohibition of truck traffic is not feasible for this project. Limited right-of-way would not permit the construction of berms. Noise barriers, to be effective, must be solid with no gaps. Along the existing section of US 12 there are 15 receptors that would be exposed to design hour noise levels that approach or exceed 67 dBA Leq. These 15 properties have access to the proposed project prohibiting the construction of effective noise barriers. Along the new alignment section of the proposed project, there are three (3) residences that would be exposed to an increase of 15 dBA or more over the existing Leq noise level. It is impossible to construct a noise barrier for scattered individual properties that meets the cost criteria established in TRANS 405.

The 66 dBA Leq setback distance along the proposed Alternative 7a would be 100 feet west of Commerce Parkway and 90 feet east of Commerce Parkway. The setback distance indicates that noise levels within this distance, measured perpendicular to the centerline in either direction, is 66 dBA Leq or greater. This setback distance was developed to assist local planning authorities in developing land use control over the remaining undeveloped lands along the project in order to prevent further development of incompatible land use.

Table 30: Traffic Noise Impact Summary Alternative 2b

Receptor location or site identification (See attached Exhibits)	Distance from C/L of near-lane to receptor in meters (m)	Number of families or people typical of this receptor site ¹	SOUND LEVEL LEQ (dBA)			IMPACT EVALUATION		
			Noise Abatement Criteria (NAC)	Future Noise Level Alt 2b	Existing Noise Level	Difference in future and existing noise levels (col. e minus col. f)	Difference in future and existing abatement criteria (col. e minus col. d)	Impact or No Impact (*) Alt 2b
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Alternative 2b								
N1	56(185)	Res (3)	67	61	57	4	-6	N
N2	49 (160)	Res (4)	67	62	63	-1	-5	N
N3	17 (57)	Res (5)	67	71	67	5	5	I
N4	40 (132)	Res (9)	67	65	64	1	-2	N
N5	25 (82)	Res (3)	67	68	67	1	1	I
N6	19 (62)	Res (14)	67	67	66	1	0	I
N7	28 (92)	Res (4)	67	65	67	-2	-2	N
N8	10 (32)	Res (9)	67	69	65	4	2	I
N9	10 (32)	Res (10), Ch, Sc	67	69	65	4	2	I
N10	7 (22)	Com (2)	72	71	67	4	-1	I
N11	13 (42)	Res (14), Ch	67	67	64	3	0	I
N12	25 (82)	Res (11)	67	63	62	1	-4	N
N13	8 (26)	Com (32)	72	70	68	2	-2	N
N14	9 (28)	Com (4)	72	67	63	4	-5	N
N15	16 (53)	Res (3)	67	64	60	4	-3	N
N16	10 (33)	Res (11)	67	66	62	4	-1	I
N17	21 (68)	Res (12)	67	62	60	2	-5	N
N18	12 (38)	Res (5)	67	66	62	4	-1	I
N19	18 (58)	Res (8), SCC	67	63	59	4	-4	N
N20	10 (33)	Res (10)	67	67	63	4	0	I

Alternative 3								
N21	21 (69)	Res (2)	67	65	62	3	-2	N
N22	27 (89)	Res (4)	67	64	61	3	-3	N
N23	27 (89)	Res (3)	67	64	61	3	-3	N
N24	24 (79)	Res (4)	67	65	62	3	-2	N
Alternative 7								
N25	124 (408)	Res (2)	67	50	50	0	-17	N
N26	56 (184)	Res (1)	67	45	45	0	-22	N
N27	71 (234)	Res (1)	67	58	58	0	-9	N
N28 ²	93 (304)	Com (1)	72	40	40	0	-32	N
N29 ²	68 (224)	Res (1)	67	40	40	0	-27	N
Alternative 7a								
N30 ²	44 (144)	Res (1)	67	39	39	0	-28	N
N31 ²	53 (174)	Res (2)	67	39	39	0	-28	N

(*) Wisconsin Administrative Code – TRANS 405.04 (2) (b)
(Siting Criteria and Policies)

I = Impact

N = No Impact

¹ Com = commercial site; Ch = church; Sc = school; SCC = senior citizen center; Res (1) = 1 residence; Res (2) = 2 residences.

² Existing Noise Level based on field measurements conducted on June 3, 2004

Table 31: Traffic Noise Impact Summary Alternative 3

Receptor location or site identification (See attached map)	Distance from C/L of near-lane to receptor in meters (m)	Number of families or people typical of this receptor site ¹	SOUND LEVEL LEQ (dBA)			IMPACT EVALUATION		
			Noise Abatement Criteria (NAC)	Future Noise Level Alt 3	Existing Noise Level	Difference in future and existing noise levels (col. e minus col. f)	Difference in future and existing abatement criteria (col. e minus col. d)	Impact or No Impact (*)
								Alt 3
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Alternative 2b								
N1	56(185)	Res (3)	67	58	57	1	-9	N
N2	49 (160)	Res (4)	67	64	63	1	-3	N
N3	17 (57)	Res (5)	67	69	67	2	2	I
N4	40 (132)	Res (9)	67	66	64	2	-1	I
N5	25 (82)	Res (3)	67	69	67	2	2	I
N6	19 (62)	Res (14)	67	67	66	1	0	I
N7	28 (92)	Res (4)	67	68	67	1	1	I
N8	10 (32)	Res (9)	67	66	65	1	-1	I
N9	10 (32)	Res (10), Ch, Sc	67	66	65	1	-1	I
N10	7 (22)	Com (2)	72	68	67	1	-4	N
N11	13 (42)	Res (14), Ch	67	65	64	1	-2	N
N12	25 (82)	Res (11)	67	63	62	1	-4	N
N13	8 (26)	Com (32)	72	69	68	1	-3	N
N14	9 (28)	Com (4)	72	64	63	1	-8	N
N15	16 (53)	Res (3)	67	60	60	0	-7	N
N16	10 (33)	Res (11)	67	63	62	1	-4	N
N17	21 (68)	Res (12)	67	60	60	0	-7	N
N18	12 (38)	Res (5)	67	63	62	1	-4	N
N19	18 (58)	Res (8), SCC	67	60	59	1	-7	N
N20	10 (33)	Res (10)	67	64	63	1	-3	N
Alternative 3								

N21	21 (69)	Res (2)	67	66	63	4	-1	I
N22	27 (89)	Res (4)	67	65	61	4	-2	N
N23	27 (89)	Res (3)	67	65	61	4	-2	N
N24	24 (79)	Res (4)	67	66	62	4	-1	I
Alternative 7								
N25	124 (408)	Res (2)	67	50	50	0	-17	N
N26	56 (184)	Res (1)	67	45	45	0	-22	N
N27	71 (234)	Res (1)	67	58	58	0	-9	N
N28 ²	93 (304)	Com (1)	72	40	40	0	-32	N
N29 ²	68 (224)	Res (1)	67	40	40	0	-27	N
Alternative 7a								
N30 ²	44 (144)	Res (1)	67	39	39	0	-28	N
N31 ²	53 (174)	Res (2)	67	39	39	0	-28	N

(*) Wisconsin Administrative Code – TRANS 405.04 (2) (b)
(Siting Criteria and Policies)

I = Impact N = No Impact

¹ Com = commercial site; Ch = church; Sc = school; SCC = senior citizen center; Res (1) = 1 residence; Res (2) = 2 residences.

² Existing Noise Level based on field measurements conducted on June 3, 2004

Table 32: Traffic Noise Impact Summary Alternative 7

Receptor location or site identification (See attached map)	Distance from C/L of near-lane to receptor in meters (m)	Number of families or people typical of this receptor site ¹	SOUND LEVEL LEQ (dBA)			IMPACT EVALUATION		
			Noise Abatement Criteria (NAC)	Future Noise Level	Existing Noise Level	Difference in future and existing noise levels (col. e minus col. f)	Difference in future and existing abatement criteria (col. e minus col. d)	Impact or No Impact
				Alt 7				(*) Alt 7
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Alternative 2b								
N1	56(185)	Res (3)	67	61	57	4	-6	N
N2	49 (160)	Res (4)	67	64	63	1	-3	N
N3	17 (57)	Res (5)	67	68	67	1	1	I
N4	40 (132)	Res (9)	67	65	64	1	-2	N
N5	25 (82)	Res (3)	67	68	67	1	1	I
N6	19 (62)	Res (14)	67	65	66	-1	-2	N
N7	28 (92)	Res (4)	67	66	67	-1	-1	I
N8	10 (32)	Res (9)	67	64	65	-1	-3	N
N9	10 (32)	Res (10), Ch, Sc	67	64	65	-1	-3	N
N10	7 (22)	Com (2)	72	65	67	-2	-7	N
N11	13 (42)	Res (14), Ch	67	63	64	-1	-4	N
N12	25 (82)	Res (11)	67	61	62	-1	-6	N
N13	8 (26)	Com (32)	72	68	68	0	-4	N
N14	9 (28)	Com (4)	72	63	63	0	-9	N
N15	16 (53)	Res (3)	67	59	60	-1	-8	N
N16	10 (33)	Res (11)	67	62	62	0	-5	N
N17	21 (68)	Res (12)	67	60	60	0	-7	N
N18	12 (38)	Res (5)	67	62	62	0	-5	N
N19	18 (58)	Res (8), SCC	67	59	59	0	-8	N
N20	10 (33)	Res (10)	67	63	63	0	-4	N

Alternative 3								
N21	21 (69)	Res (2)	67	65	62	3	-2	N
N22	27 (89)	Res (4)	67	64	61	3	-3	N
N23	27 (89)	Res (3)	67	64	61	3	-3	N
N24	24 (79)	Res (4)	67	65	62	3	-2	N
Alternative 7								
N25	124 (408)	Res (2)	67	56	50	6	-11	N
N26	56 (184)	Res (1)	67	62	45	17	-5	I
N27	71 (234)	Res (1)	67	59	58	1	-8	N
N28 ²	93 (304)	Com (1)	67	56	40	16	-16	I
N29 ²	68 (224)	Res (1)	67	59	40	19	-8	I
Alternative 7a								
N30 ²	44 (144)	Res (1)	67	39	39	0	-28	N
N31 ²	53 (174)	Res (2)	67	39	39	0	-28	N

(*) Wisconsin Administrative Code – TRANS 405.04 (2) (b)
(Siting Criteria and Policies)

I = Impact N = No Impact

¹ Com = commercial site; Ch = church; Sc = school; SCC = senior citizen center; Res (1) = 1 residence; Res (2) = 2 residences.

² Existing Noise Level based on field measurements conducted on June 3, 2004

Table 33: Traffic Noise Impact Summary Alternative 7a

Receptor location or site identification (See attached map)	Distance from C/L of near-lane to receptor in meters (m)	Number of families or people typical of this receptor site ¹	SOUND LEVEL LEQ (dBA)			IMPACT EVALUATION		
			Noise Abatement Criteria (NAC)	Future Noise Level Alt 7	Existing Noise Level	Difference in future and existing noise levels (col. e minus col. f)	Difference in future and existing abatement criteria (col. e minus col. d)	Impact or No Impact (*) Alt 7a
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Alternative 2b								
N1	56(185)	Res (3)	67	61	57	4	-6	N
N2	49 (160)	Res (4)	67	64	63	1	-3	N
N3	17 (57)	Res (5)	67	68	67	1	1	I
N4	40 (132)	Res (9)	67	65	64	1	-2	N
N5	25 (82)	Res (3)	67	68	67	1	1	I
N6	19 (62)	Res (14)	67	65	66	-1	-2	N
N7	28 (92)	Res (4)	67	66	67	-1	-1	I
N8	10 (32)	Res (9)	67	64	65	-1	-3	N
N9	10 (32)	Res (10), Ch, Sc	67	64	65	-1	-3	N
N10	7 (22)	Com (2)	72	65	67	-2	-7	N
N11	13 (42)	Res (14), Ch	67	63	64	-1	-4	N
N12	25 (82)	Res (11)	67	61	62	-1	-6	N
N13	8 (26)	Com (32)	72	68	68	0	-4	N
N14	9 (28)	Com (4)	72	63	63	0	-9	N
N15	16 (53)	Res (3)	67	59	60	-1	-8	N
N16	10 (33)	Res (11)	67	62	62	0	-5	N
N17	21 (68)	Res (12)	67	60	60	0	-7	N
N18	12 (38)	Res (5)	67	62	62	0	-5	N
N19	18 (58)	Res (8), SCC	67	59	59	0	-8	N
N20	10 (33)	Res (10)	67	63	63	0	-4	N

Alternative 3								
N21	21 (69)	Res (2)	67	65	62	3	-2	N
N22	27 (89)	Res (4)	67	64	61	3	-3	N
N23	27 (89)	Res (3)	67	64	61	3	-3	N
N24	24 (79)	Res (4)	67	65	62	3	-2	N
Alternative 7								
N25	124 (408)	Res (2)	67	59	50	9	-8	N
N26	56 (184)	Res (1)	67	--	45	-45	-67	N
N27	71 (234)	Res (1)	67	60	58	2	-7	N
N28 ²	93 (304)	Com (1)	72	40	40	0	-32	N
N29 ²	68 (224)	Res (1)	67	40	40	0	-27	N
Alternative 7a								
N30 ²	44 (144)	Res (1)	67	62	39	23	-5	I
N31 ²	53 (174)	Res (2)	67	61	39	22	-6	I

(*) Wisconsin Administrative Code – TRANS 405.04 (2) (b)
(Siting Criteria and Policies)

I = Impact N = No Impact

¹ Com = commercial site; Ch = church; Sc = school; SCC = senior citizen center; Res (1) = 1 residence; Res (2) = 2 residences.

² Existing Noise Level based on field measurements conducted on June 3, 2004

4. Hazardous Substances or Underground Storage Tanks (UST's) Factor Sheet

1) Briefly describe the results of the initial project review on the parcels affected by this project.

A preliminary Phase 1 screening assessment was conducted in the study area to identify sites that may warrant further investigation during the design phase. The screening assessment consisted of a records search and survey of properties that may potentially impact the selected project. The records review includes the DNR Leaking Underground Storage Tank (LUST) lists, Wisconsin Department of Commerce Underground Storage Tank (UST) lists, and DNR Spill lists, as well as other sources such as topographic, soil, and plat maps together with regional geologic and hydrogeologic data. Other federal and state regulatory databases were also searched.

2) Indicate the type(s) of contamination (if any) suspected to be affecting sites in the project area.

Table 34: Types of Contamination within ¼ Mile of Each Alternative

Contamination Type	Alt 2b	Alt 3	Alt 7	Alt 7a
RCRIS Small Quantity Generators	22	0	0	0
Leaking Underground Storage Tank	21	0	0	0
Underground Storage Tank	41	6	1	1
Spills	8	0	1	3
WI Emergency Repair Program	8	0	0	0
Brownfield Institutional Control	1	0	0	0
TOTAL	101 sites	6	2	4

Table 35: Types of Contamination within Study Corridors

Contamination Type	Alt 2b	Alt 3	Alt 7	Alt 7a
RCRIS Small Quantity Generators	20	0	0	0
Leaking Underground Storage Tank	18	0	0	0
Underground Storage Tank	29	6	1	1
Spills	6	0	1	2
WI Emergency Repair Program	5	0	0	0
Brownfield Institutional Control	1	0	0	0
TOTAL	79	6	2	3

Alternative 2b

Due to the urban nature of this alternative's location, a larger number of properties with the potential to impact subsurface conditions are located adjacent to the project corridor. These properties are mainly cases where the potential for petroleum contamination poses a threat to the soil and or groundwater within the potential project limits. In most instances, the anticipated subsurface impacts are related to the current or past use of petroleum underground storage tanks associated with gasoline service/filling stations.

Alternative 3

Six underground storage tanks (UST) were located within the study corridor. None were identified as leaking. If this alternative is selected, these UST cases would be further investigated to determine if property acquisition and /or excavation would occur in their immediate vicinity.

Alternative 7 & 7a

The number of hazardous sites is low on these alternatives due to their location in a rural area with few existing or former businesses that may have used hazardous materials.

In the rural areas of Alternatives 2b, 3 7 and 7a, there is potential for construction in areas where pesticide and/or herbicide was used to treat agricultural land. Past or present storage of these chemicals in or near farm buildings is possible. Upon selection of an alternative, further study would likely be necessary to evaluate the possible presence of agricultural chemicals within the project corridor.

3) Indicate the number and identify the parcels which are determined to require an Environmental Site Investigation or for which the Initial project review was not conducted.

Alternative 2b

The need for additional investigation at each of these sites would be based on the excavation and/or right-of-way acquisition requirements as related to the project. For Alternative 2b, there would be a minimal amount of widening and excavation.

Alternative 3

The number of Environmental Site Investigations for Alternative 3 would likely be low since it is along an existing alignment, widening would be minimal, it is in a rural setting (rather than an urban setting) and since the number of identified sites (shown in Table 34 on page on page 144) are low.

Alternative 7 and 7a

Based on the limited number of sites listed for the project corridor and the fact that it is in a rural area, it is unlikely that additional Environmental Site Assessments would be required for these alternatives.

4) Describe proposed course of action to avoid hazardous materials contamination for this project. For example, changes in location, changes in design, remediation of contaminated areas, etc.

To be determined if this alternative is selected as the preferred alternative.

5. Energy Requirements

1) In general terms, briefly discuss the construction and operational energy requirements and conservation potential of the various alternatives under consideration. Indicate whether the savings in operational energy are greater than the energy required to construct the facility.

Highway operational energy consumption generally includes the fuel used to construct and to operate the highway. For this project, fuel would be consumed by the equipment used to construct, operate, and maintain the highway as well as by the vehicles using the highway. The consumption levels are a function of several variables.

Consumption levels for vehicles using the highway are a function of the types of vehicles (i.e. trucks vs. cars), travel speeds, congestion levels, induced travel, and increased trips generated by induced land development. The most important factor affecting energy consumption by traveling vehicles is speed.

The no action alternative would over time require increased consumption due to increased congestion, slower travel speeds and the need to stop and go at intersections. In addition, maintenance energy requirements would be higher in the short term than a new highway. Eventually the roadway will need to be reconstructed, at which time energy for construction will be used.

Alternative 3 and Alternative 2b, since they are not access controlled freeways, would require greater consumption due to uneven travel speeds. At the same time they would require less energy consumption during the construction phase than the construction of a bypass. The routes used for Alternatives 3 and 2b would require resurfacing or reconstruction sooner than Alternatives 7 and 7a, simply due to their age. CTH N would require resurfacing in approximately 2015.

The construction of Alternatives 7 and 7a would require greater energy consumption than the other alternatives, but less consumption from vehicles using the highway because of higher, even speeds and less congestion. Initially, the new highways would require less energy consumption from maintenance actions. Depending on how well the highway is maintained, the roadway could last 20 to 30 years before requiring resurfacing.

D. CULTURAL ENVIRONMENT FACTORS**1. Historic Structures/Buildings Impact Evaluation Factor Sheet**

The following properties within the Area of Potential Effect (APE) have been determined eligible for or are listed on the National Register of Historic Places. See Figure 30 through Figure 33 on pages 151 - 154.

Table 36: Eligible and Listed Historic Properties by Alternative

Property Name	Ownership	Location	Use	Alternative
Merchants Avenue Historic District	Multiple private	Roughly bound by South Third Street East, South Milwaukee Avenue East, Foster Street, and Whitewater and Merchants Avenues	Central Business District, Fort Atkinson	1a, 2b
Main Street Historic District	Multiple private	Roughly Main Street from Sherman Avenue to South Third Street	Central Business District, Fort Atkinson	1a, 2b
Arthur R. Hoard House	Private	323 Merchants Avenue	Museum	1a, 2b
Rankin/Ivey House	Private	400 West Madison Avenue/US 12	Residential	1a, 2b
J. Powers House/Fort Atkinson Hospital	Private	408 West Madison Avenue	Residential	1a, 2b
First Church of Christ, Scientist	Private	359 Whitewater Avenue	Church	1a, 2b
Telfer-Gillerd House	Private	916 Whitewater Avenue	Residential	1a, 2b
Anson Warner Homestead	Private	N9334 Warner Road	Residential	3
Kyle Farmstead	Private	11728 CTH N	Rural Residential	3
Burrows-Warner House	Private	13321 CTH N	Domestic: Single dwelling, agriculture/subsistence: storage, animal facility, agricultural outbuilding	3
Rupnow Farmstead	Private	7423 CTH N	Domestic: Single dwelling, agriculture/subsistence: storage, animal facility, agricultural outbuilding	3

1) Assessment of Effects under Section 106 of the National Historic Preservation Act. (An adverse effect is found when a project may alter, directly or indirectly, any of the characteristics of a historic structure or building that qualify it for inclusion in the National Register of Historic Places.):

- ☐ No Historic Properties Affected
- ☐ No Adverse Effect
- ☐ Adverse Effect (specify)

The Assessment of Effects will be completed for the preferred alternative.

2) Do FHWA requirements for Section 4(f) apply to the project's use of the historic property?

- ☐ No
- ☐ Project is not federally funded
- ☐ Property is not on or eligible for the National Register of Historic Places.
- ☒ Other - explain:
- ☐ Yes - Complete Unique Area Factor Sheet

Effect will be determined through the Section 106 process for the preferred alternative. If an effect is determined, a Unique Area Factor Sheet will be completed.

No Action, Alternative 1a and Alternative 2b

The Merchant Avenue and Main Street Historic Districts in downtown Fort Atkinson could potentially be affected by the through-city alternatives. For Alternative 2b, right-of-way is expected to be required near the intersection of Main Street and South Third Street and along Main Street, south of South Third Street, just outside the Merchant's Area Historic District. No right-of-way would be acquired within the District. In order to implement Alternative 2b, this intersection improvement may not be required to maintain a LOS C, but does better accommodate heavy truck turn movement.

Alternative 3

As the alignment is currently drawn, right-of-way would be taken from the Rupnow Farmstead; however, based on the topography in the area, an alternative section with mountable curb/gutter could be used to minimize impacts and avoid acquiring right-of-way.

3) Describe the significance of the structures and/or buildings (quote or summarize the statement of significance from the Determination of Eligibility). Property is a National Historic Landmark?

Merchant's Avenue Historic District: The Merchants Avenue historic district has the best concentration of nineteenth and early twentieth century architectural styles as well as the best individual examples of the Greek Revival, Gothic Revival cottage, and Second Empire styles in Fort Atkinson. And, overall, the district has the highest level of integrity and preservation of any group of houses in the community. The district contains a number of brick houses, a popular method of construction fostered by the establishment of a local brickyard in 1867. Although other fine brick houses exist within the community, again, the best concentration of brick construction is in this district. The Merchant's Avenue Historic District is eligible for the National Register under Criterion C: Architecture applying Criterion Consideration A: Industry/Commerce.

Main Street Historic District: The Main Street historic district is historically significant as the commercial center of Fort Atkinson from 1836 to present. It is architecturally significant as a collection of representative 19th century commercial buildings. The district conveys a cohesive and harmonious unity of scale, material and detail that clearly distinguishes it from its surroundings. The Main Street Historic District is eligible for the National Register under Criterion C: Architecture applying Criterion Consideration A: Commerce. Several building in the district are individually significant for their high quality craftsmanship, as evidenced in decorative metal cornices and lintels, shingled bay windows and detailed brickwork. Historically significant as the mercantile center for a wide farming region around Fort Atkinson, the Main Street historic district provided the region with extensive retail, financial, social and professional services.

Arthur R. Hoard House: The Arthur R. Hoard House (aka George P. Marston House) is eligible as an example of an Italianate and Queen Anne style. It was historically used as a domestic dwelling and now is used as a history museum.

Rankin/Ivey House: The Rankin/Ivey House was determined eligible in 1999. The house has stick-work in the gables and on the porch. The chimneys were built by John V. Becker. Edward and Amelia Rankin were involved in the local poorhouse and women's groups such as the Tuesday Club and the DAR. Zida Ivey, who lived here from the 1930s until her death in 1965, established Fort Atkinson's historical museum and participated in over 21 civic organizations.

J. Powers House/Fort Atkinson Hospital: This structure has a screened wrap around porch, tower and round arched windows with hoods and keystones. Powers founded the first industry in town: Northwestern Furniture Co. The second owners were Walter and Geanette Greene. Walter was a senator from 1873-1874 and 1887-1891. The house was then owned by the Brown and Hunter families. Dr. and Mrs. Majerus converted the house into a hospital from 1921-1950. It then became a nursing home and finally, apartments.

First Church of Christ, Scientist: The First Church of Christ, Scientist is eligible for the National Register under Criterion C: Architecture, applying Criterion Consideration A: Religious Properties. The First Church of Christ, Scientist represents an early twentieth-century Neo-Classical church designed by renowned church architect Hugo C. Haeuser. Although Neo-classical church architecture is common among Christian Scientists, it is an uncommon style of church architecture for the early 1930s. The First Church of Christ, Scientist is the only example of the Neo-Classical church architecture in Fort Atkinson.

Telfer-Gillerd House: The Telfer-Gillerd House is eligible for the National Register under Criterion C: Architecture. Although the Telfer-Gillerd House has a one-story modern rear addition and the two-bay attached garage, they do not detract from the composition of the house. Overall, the Telfer-Gillerd House is a good example of a Prairie-style residence in the Fort Atkinson area.

Anson Warner Homestead: The Anson Warner Farmstead is eligible for the National Register of Historic Places under Criterion C: Architecture, as a prominent local example of a nineteenth century farmstead featuring a high style residence and a complement of four contributing outbuildings. The brick house, composed of a one-and-a-half story ell and a two-story gable section, combines features of the Greek Revival and Italianate styles of architecture. The house was constructed c. 1857 and remains in good condition. Few brick houses in the area combine stylistic features of the Greek Revival style, including a pedimented gable and cornice returns, with elements of the Italianate style, including paired scrolled brackets and a prominent main façade porch. Four agricultural buildings contribute to the farmstead's significance and include a barn, poultry house, milk house, and carriage house. All outbuildings are in good condition.

Since its purchase in 1846, the farmstead has remained under the ownership of the Warner family. The period of significance for the Warner Farmstead is c. 1857 to 1917, encompassing the construction dates of the house and all outbuildings.

Kyle Farmstead: The Kyle Farmstead is eligible for the National Register under Criterion C: Architecture as an intact example of a late nineteenth-and early twentieth-century farmstead in Rock County, Wisconsin. The farmstead is composed of a c. 1865 Italianate farmhouse with minimal alterations and a complement of 12 contributing buildings, structures, and objects constructed from c. 1865 to c.1940.

Burrows-Warner Farmstead: The Burrows-Warner Farmstead, composed of a nineteenth-century Greek Revival farmhouse, a turn-of-the-century second house, and 11 contributing agricultural outbuildings and structures, is eligible for the National Register under Criterion C: Architecture. This property is an architecturally significant example of an intact mid-nineteenth- to early twentieth-century farmstead.

Rupnow Farmstead: The Rupnow Farmstead is eligible for the National Register under Criterion C: Architecture. It is a fine example of an intact early twentieth-century dairy farmstead, including a farmhouse and a collection of 11 agricultural outbuildings in Rock County.

4) The proposed project's effects on the historic property, (e.g., structure or building) have been evaluated in the following report, a copy of which is:

- ☐ in the project file, or
- ☐ attached to this document.
- ☐ Documentation for Determination that No Historic Properties Will Be Affected.
- ☐ Documentation for Determination of No Adverse Effect to historic properties.
- ☐ Documentation for Consultation about adverse effect(s). Stipulations that mitigate the adverse effect(s) are listed in Item 10, below.

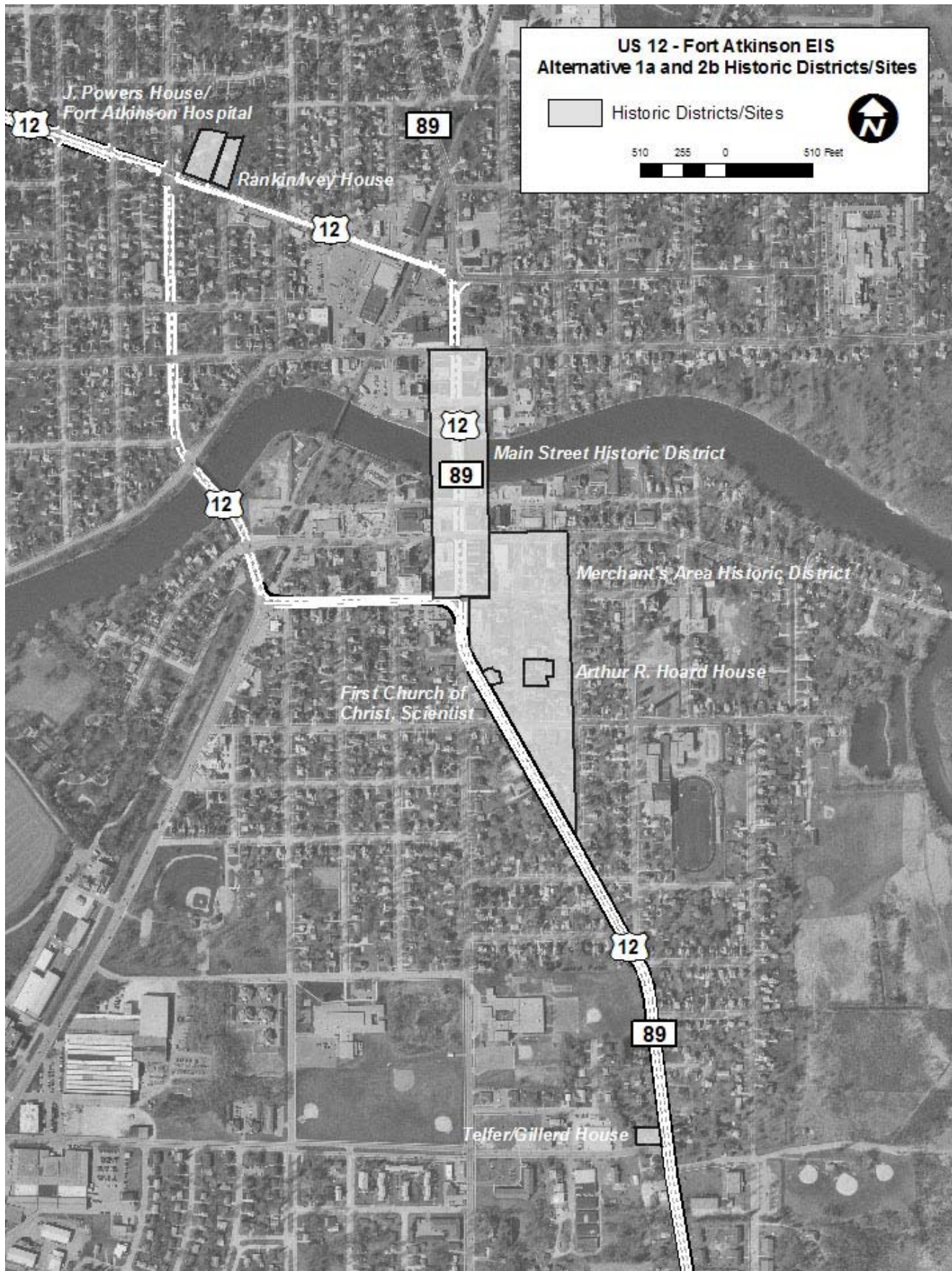
The Section 106 process will be completed for the preferred alternative.

5) Describe any alternative with an adverse effect, but without a Section 4(f) use, and indicate whether it is feasible and prudent. A map that shows the structures/buildings in relation to the project and a sketch, plan, or other graphic that clearly illustrates the effects on the structures/buildings must be included.

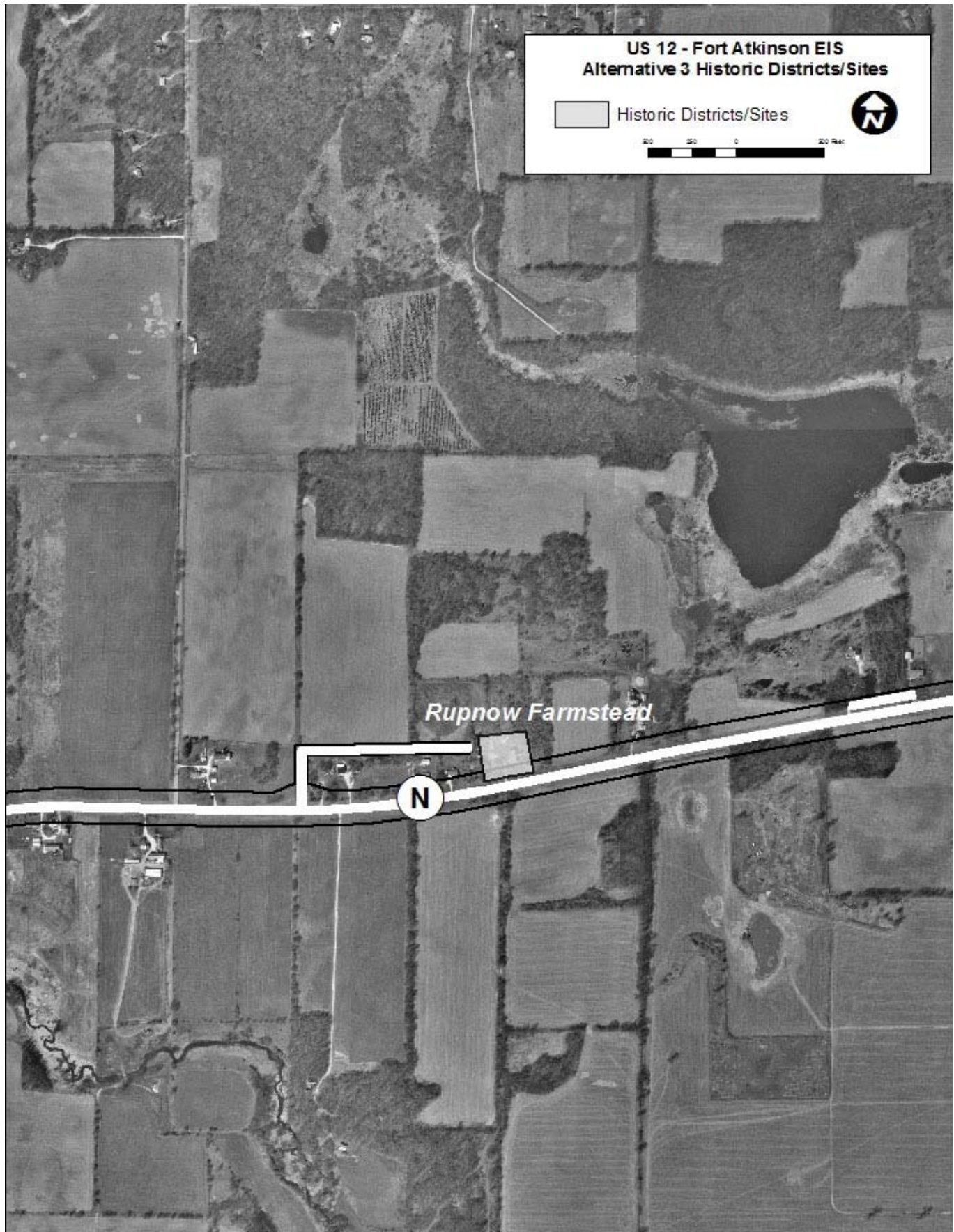
At this time, the alternatives have been or can be designed to avoid direct impacts to historic properties.

6) List or summarize the stipulations from the Memorandum of Agreement below.

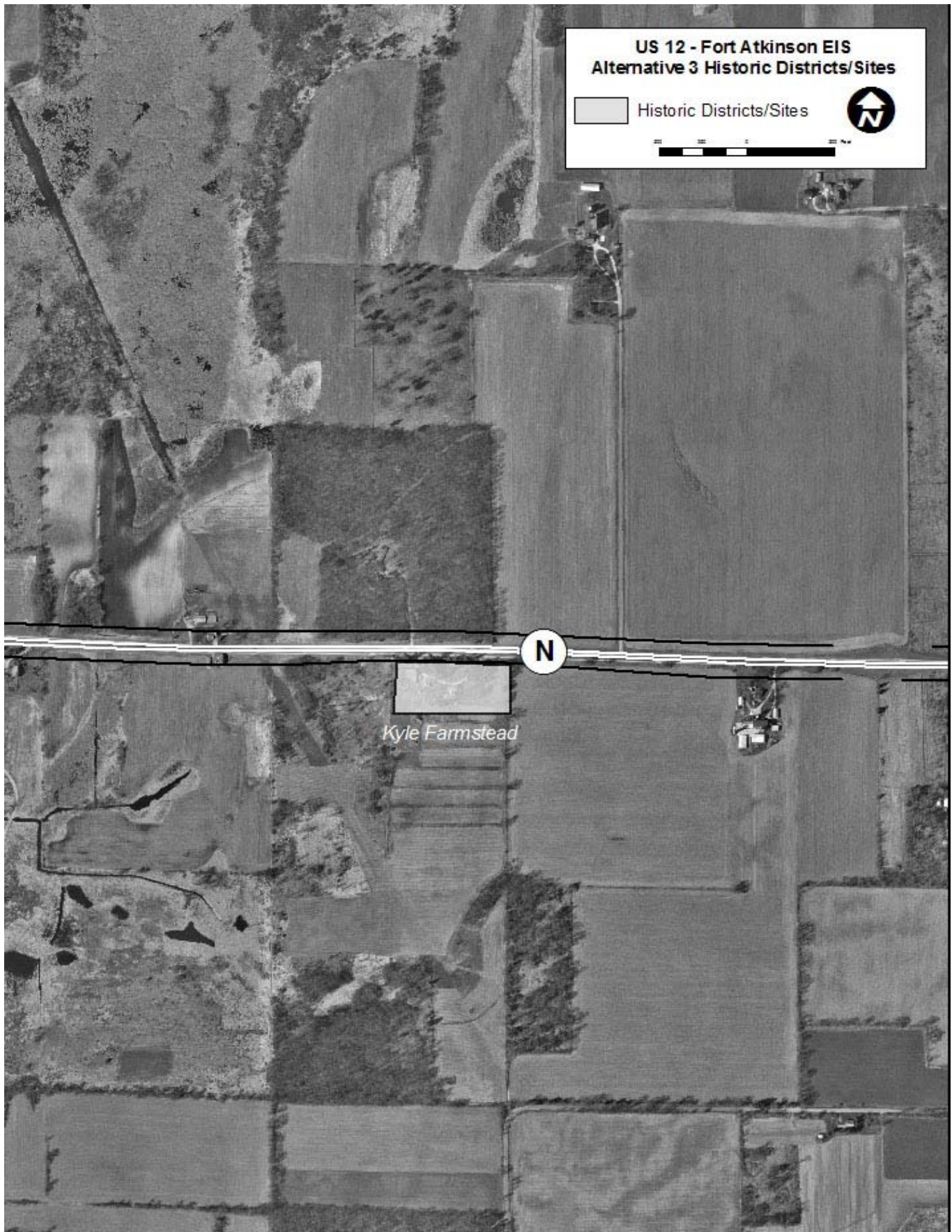
The Section 106 process will be done for the preferred alternative. An MOA would be prepared as part of the 106 process, if the impacts of the selected alternative require mitigation.



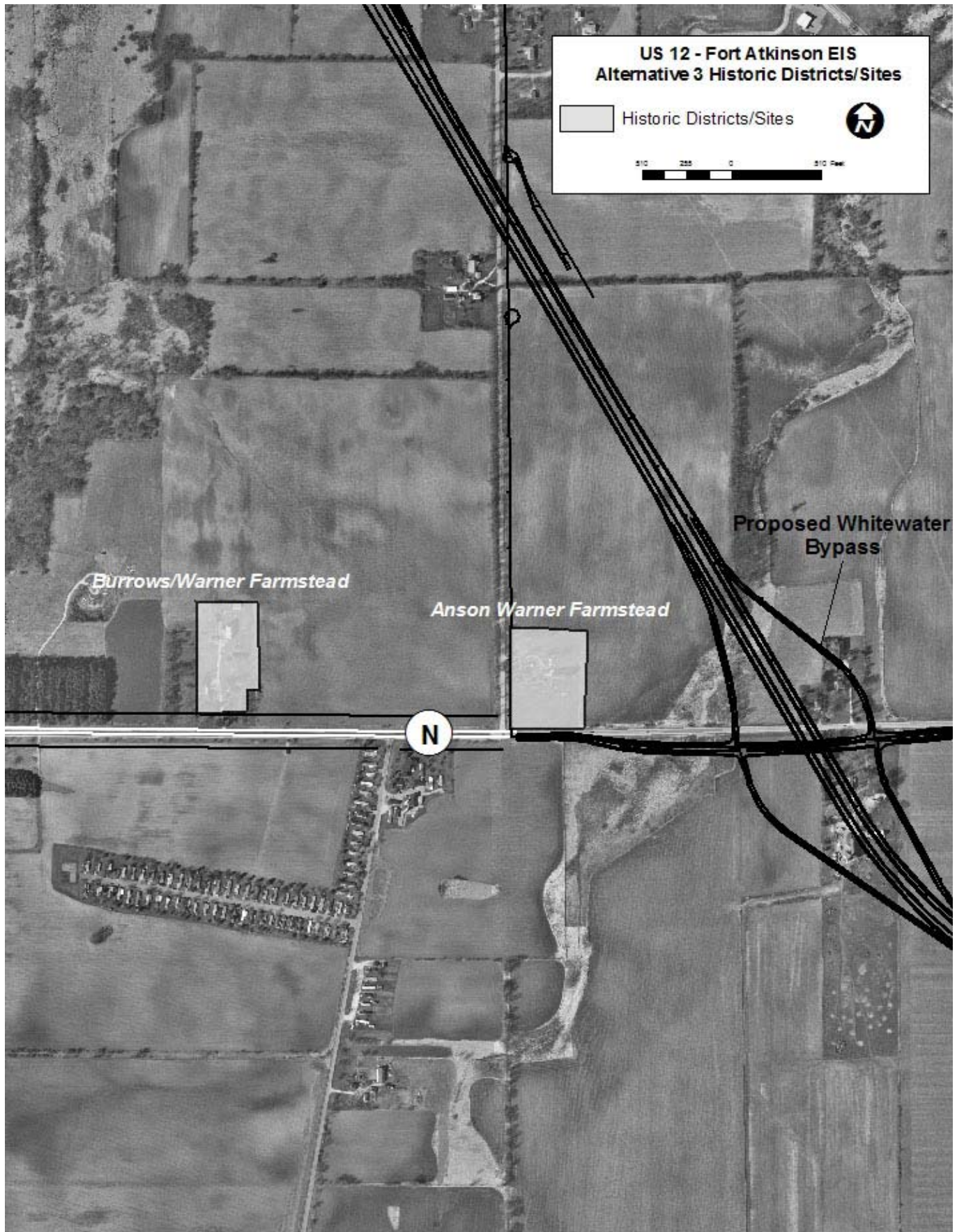
Source: Mead & Hunt, HNTB Corporation



Source: Mead & Hunt, Inc., HNTB Corporation



Source: Mead & Hunt, Inc., HNTB Corporation



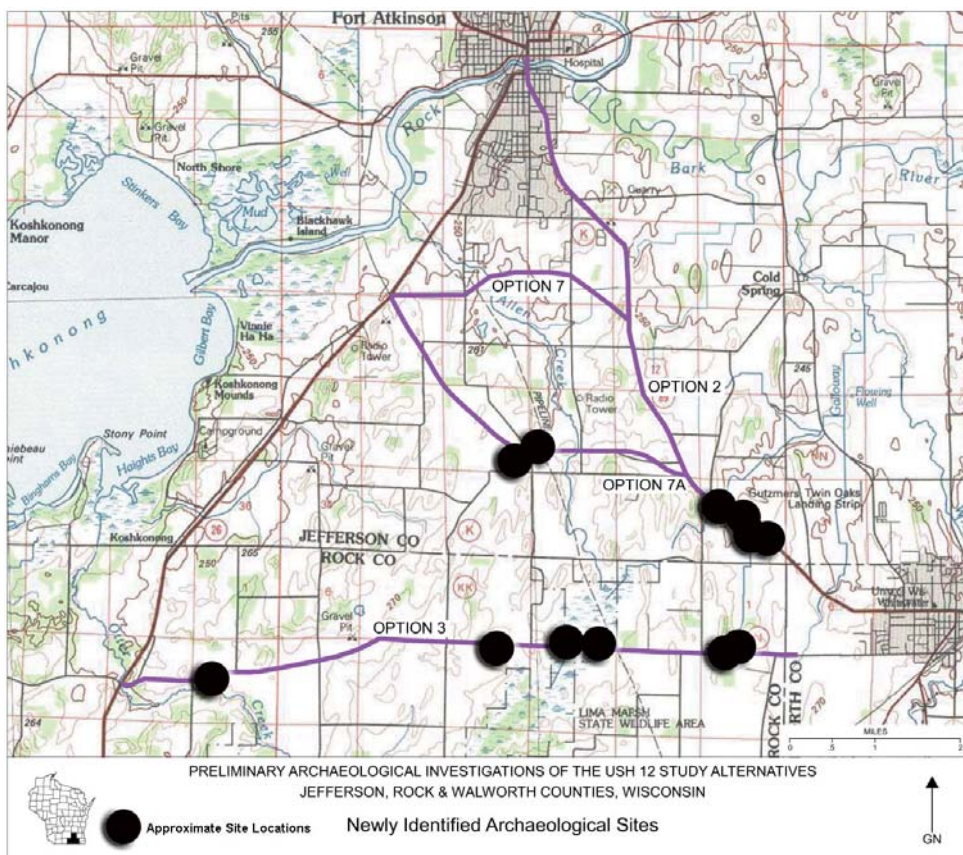
Source: Mead & Hunt, Inc., HNTB Corporation

2. Archaeological Sites Impact Evaluation Factor Sheet

1) Identify each site by alternative. Attach map to appendices depicting sites' approximate location within alternate

From June through August of 2004, Great Lakes Archaeological Research Center (GLARC) conducted archaeological field investigations within the four alternative study corridors. The combined acreage of the four survey alternatives totaled 7,467 acres. Archaeological survey of 3,312 acres, or 44.3 percent of the combined total acreage, was completed within the survey alternatives. Resulting from these survey efforts, 12 archaeological sites were documented within the current alignments of the survey alternatives. Based on the results of archaeological survey, if the alignments of the current survey alternatives remain unchanged, Phase II evaluations were recommended for four sites: the Meandering Creek (004-09) and Pfeifer sites (004-11) in Alternative 2; and the Stubbs/Kyle (004-02) and Three Points sites (004-03) in Alternative 7. Phase II evaluations of these sites are recommended to more fully document the nature of their archaeological deposits and clarify their eligibility for listing in the NRHP. Phase II evaluations will be completed if one of these alternatives is selected as the preferred alternative. Figure 34 shows the approximate location of the sites identified in the preliminary archaeological investigation completed for the DEIS.

Figure 34: Approximate Locations of Newly Identified Archaeological Sites within the Study Corridors



Source: Great Lakes Archaeological Research Center. 2004.

Table 37: Archaeological Sites

Alt #	Site Name	Site Number	Was a Phase II Survey Done?	Site Eligible for NRHP?	Description & Pertinent Info on Site ,e.g., historic, prehistoric, archaic, etc.	Site Affected?
2b	Meandering Creek	04.004-9	Recommended	Not yet determined	Prehistoric site, lithic flaking debris	Not yet determined
2b	Winn Point	04.004-10	No	Not yet determined	Prehistoric isolated find, projectile point	Not yet determined
2b	Pfeifer	04.004-11	Recommended	Not yet determined	Prehistoric site, heat treated flakes	Not yet determined
2b	Pfeifer	04.004-12	No	Not yet determined	Prehistoric isolated find, heat treated flake and shatter	Not yet determined
3	Walenton	04.004-1	No	Not yet determined	Historic log cabin site	Not yet determined
3	Stubbs/Kyle	04.004-2	Recommended	Not yet determined	Prehistoric site, cultural materials	Not yet determined
3	Three points	04.004-3	Recommended	Not yet determined	Prehistoric site, projectile points and cultural materials	Not yet determined
3	Elliot	04.004-4	No	Not yet determined	Prehistoric site, cultural materials	Not yet determined
3	Leonard	04.004-5	No	Not yet determined	Prehistoric site, light lithic scatter	Not yet determined
3	Fisher	04.004-6	No	Not yet determined	Prehistoric site, lithic flakes	Not yet determined
7	ACS 1988 Site #15	Je895	No	Not yet determined	Prehistoric site, projectile points	Not yet determined. Location was surveyed and no prehistoric materials were encountered during shovel probe testing.
7a	Hovel	04.004-7	No	Not yet determined	Historic creamery site	Not yet determined
7a	Sheep Pasture	04.004-8	No	Not yet determined	Historic cement block foundations	Not yet determined
7a	IMAC 1996 Site 418-1	Je998	No	Not yet determined	Lithic scatter	Not yet determined. Location not field verified, unable to contact property owner.

2) Identify Native American Tribe(s) expressing an interest in the project.

- ☐ Bad River Band of Lake Superior Chippewa
- ☐ Forest County Potawatomi Community of Wisconsin
- ☒ HoChunk Nation (consulting party)
- ☐ Lac de Flambeau Band of Lake Superior Indians of Wisconsin
- ☐ LacCourte Oreilles Band of Lake Superior
- ☐ Menominee Indian Tribe of Wisconsin
- ☐ Chippewa Indians of Wisconsin
- ☐ Mohican Nation, Stockbridge Munsee
- ☒ Oneida Tribe of Indians of Wisconsin Community of Wisconsin (not as a consulting party)
- ☐ Red Cliff Band of Lake Superior
- ☐ Sokaogon Chippewa (Mole Lake) Community of Wisconsin Chippewa Indians of Wisconsin
- ☒ St. Croix Chippewa Indians of Wisconsin (not as a consulting party)
- ☒ Others:Great Lakes Inter-Tribal Council, Inc. (not as a consulting party)

Mr. Robert J. Jeske, Wisconsin Archaeological Survey (consulting party)
Prairie Band Potawatomi Nation (not as consulting party)

3) Provide information on consultation, contacts, meetings, site visit, etc. with Native Americans. (Attach any pertinent correspondence in appendices)

See Appendix J for letters sent to consulting parties and the responses received. Potential consulting parties are on the general mailing list for the DEIS to receive newsletters, which contain invitations to the public informational meetings and other information pertinent to the project. See Appendix E for Public Involvement media and documentation.

4) Has a Determination of Eligibility (DOE) been prepared?

- ☒ No - Draft EIS—Evaluation Survey will be conducted on selected alternative site(s) and any DOE prepared will be documented in the Final EIS
☐ No - EA - Evaluation Survey will be conducted on the selected alternative site(s) and any DOE prepared will be documented in FONSI
☐ Yes - Complete the items 5 through 12 below:

5) Do FHWA requirements for Section 4(f) apply to the project's use of the historic property?

- ☐ No
☐ Project is not federally funded
☐ Property is not on or eligible for the National Register of Historic Places.
☒ Other - explain: Not Anticipated
☐ Yes - Complete Factor Sheet O - Unique Area Impact Evaluation

There is no evidence at this time that any of the alternatives will impact an archaeological site. If the evaluation survey shows that properties eligible for the National Register of Historic Places would be affected, the Unique Area Impact Evaluation Sheet will be completed to address FHWA requirements for Section 4(f), if site(s) are eligible for location.

6) Identify site(s) that will be affected by the project and indicate effect

There is no evidence at this time that any of the alternatives will impact an archaeological site. The evaluation survey will show if any properties eligible for the National Register of Historic Places would be affected.

7) Date (m/d/yy) Advisory Council on Historic Preservation (ACHP) Notified of project by FHWA

Letter dated 06/07/05 can be found in Appendix B.

8) Date of Consultation:

- a) Date (M/d/yy) SHPO
Data Recovery Plan accepted?
b) Date (M/d/yy) Native Americans
Data Recovery Plan accepted?

The Tribes have been contacted. Consultation will continue pending determination of adverse effect.

Specify Tribe(s) Consulted:

Not applicable at this time.

10) Has a Memorandum of Agreement (MOA) been developed?

Not applicable at this time.

Indicate Date (M/d/yy) Signed:

Signatories:

- ☐ FHWA
☐ SHPO
☐ WisDOT
☐ Native Americans, Specify Tribe(s)

- ☐ Bad River Band of Lake Superior Chippewa
☐ Forest County Potawatomi Community of Wisconsin
☐ HoChunk Nation
☐ Lac de Flambeau Band of Lake Superior Indians of Wisconsin
☐ LacCourte Oreilles Band of Lake Superior
☐ Menominee Indian Tribe of Wisconsin
☐ Chippewa Indians of Wisconsin
☐ Mohican Nation, Stockbridge Munsee
☐ Oneida Tribe of Indians of Wisconsin Community of Wisconsin
☐ Red Cliff Band of Lake Superior
☐ Sokaogon Chippewa (Mole Lake) Community of Wisconsin Chippewa Indians of Wisconsin
☐ St. Croix Chippewa Indians of Wisconsin
☐ Others:

11) Has a "Documentation for Consultation" (D for C) been prepared?

Not applicable at this time.

Date (M/d/yy) transmitted to SHPO:

Date (M/d/yy) transmitted to ACHP:

Public Interpretation:

12) Has Data Recovery Plan been prepared and accepted by SHPO?

Not applicable at this time.

13) Date MOA transmitted to ACHP

Not applicable at this time.

14) List pertinent commitments to be included in the project's contract specifications:

Commitments developed through the Section 106 process would be included in the project's contract specifications.

3. Aesthetics Factor Sheet

1) Identify and briefly describe the visual character of the landscape. Include elements in the view shed such as landforms, water bodies, vegetation and human developments.

For the existing US 12 corridor, beginning at the southern end of the study corridor, lands are maintained in cropped fields, dairy farms, and scattered rural residential uses. The highway transitions from rural to urban as it enters the City of Fort Atkinson. Along this transition zone there are scattered industrial and commercial uses. As you enter the City of Fort Atkinson it gives way to mostly older residential structures, some of which are converted to commercial uses. The front setbacks within the urban area are shallow. Sidewalks are present and there are street trees varying in size, condition and spacing until you reach the central business district. Main Street in Fort Atkinson is typical of many small Midwestern cities with continuous facades and turn of the century buildings renovated in various decades in the style of the time. The Main Street Bridge over the Rock River is a focal point of the downtown. Continuing north on US 12, the views give way again to the same type of older residential uses as those south of downtown. The Robert Street portion of US 12 (currently southbound US 12) is primarily residential. The roadway itself is in disrepair in many locations, except for Madison Avenue, which was recently reconstructed from Main Street to the northern limits of the study area near the WIS26 interchange.

Along the bypass route of Alternative 7 and 7a, lands within the viewshed are cropped farmland, fields, wetlands, and wooded areas. There are also rural residential uses. At the western end of the bypass and to the north is the City of Fort Atkinson's business park, which has several vacant lots, and an existing roadway. At the western end are several homes, some on top of the hills in the area. The topography along the length is rolling to flat in character. In general the landscape is agricultural open space.

Along Rock County N, Alternative 3, the landscape is mainly cropped fields. Wetlands and woodlands are scattered. Rural residential houses, farm houses and associated barns, silos and sheds front the roadway. A number of buildings have shallow setbacks from the roadway. There are a few historic farmsteads along this corridor.

2) Indicate the visual quality of the view shed and identify landscape elements that would be visually sensitive.

Alternatives 1a and 2b

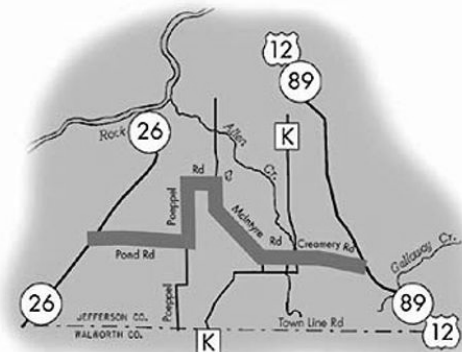
Within Fort Atkinson, along the existing US 12 route, the downtown area has two historic districts that are listed on the National Register of Historic Places. Along existing US 12 between Whitewater and Fort Atkinson has cropped farmland with scattered farmsteads and wooded areas that are visually appealing and contribute to the rural character that the Town of Koshkonong and Jefferson County strive to protect in their comprehensive plan goals and policies.

Alternative 3

The entire CTH N corridor has a rural character that is sensitive. There are four historically significant farmsteads that are contiguous to the highway. The Towns of Lima and Milton have policies in their comprehensive plans to protect the rural quality of life and to preserve natural and scenic resources.

Alternative 7

Along the bypass route of Alternative 7, in the rural areas, visually sensitive landscape elements include the agricultural and open space vistas including cropped land, rural residential uses, farm houses, wetlands, and wooded uplands.



Rustic Road 87

Alternative 7a

In the rural areas surrounding the bypass route of Alternative 7a, visually sensitive landscape elements include the agricultural and open space vistas including cropped land, farmsteads, wetlands, and wooded uplands. The beautiful vistas have been validated with the dedication of Rustic Road 87 for portions of Creamery Road, McIntyre, Poeppel and Pond Roads from US 12 to WIS 26. The area has a cherry orchard and a small country cemetery (South Koshkonong Cemetery) adding to its pastoral qualities.

3) Identify the viewers who will have a view of the improved transportation facility and those with a view from the improved transportation facility. Indicate the relative numbers (low, medium, high) of each group.

Alternative 7

Viewers of the bypass route of Alternative 7 include residents, farmers and business owners along the highway. In addition, travelers using the highway facility would have views of the facility and surrounding landscape.

Alternative 7a

Viewers include residents and farmers along the existing roadways as well as hikers, bicyclists and motorists visiting the Rustic Road. In addition, travelers using the new highway facility would have views. Houses that currently have open space views would also be viewing the new highway.

4) Indicate the relative time of day (morning, afternoon, evening, night) and the approximate amount of viewing time each viewer group would have each day.

All groups would be viewing the highway at any given time of day with the majority of viewing time during the morning through evening hours. Nearby residents may have extended viewing periods if they spend time outside their house. Travelers would view the facility during the period it takes to travel along the roadway.

5) Describe whether and how the project would affect the visual character of the landscape.

The visual character of Alternatives 7 and 7a would be remarkably different from the existing character of the landscape. Figure 35 on page 162 shows a rendering of the interchange for Alternative 7. Figure 36 on page 163 shows a rendering of the interchange for Alternative 7a.

6) Indicate the effects the project would have on the viewer groups.

Alternatives 2b and 3

Views would remain largely the same.

Alternative 7

Changes to existing residents' views of the area would be considerable. Some residences would be relatively close including those on Lieberman Road, Poeppel Road where the highway would cross over it, and those homes that would remain near the South Fort interchange with WIS 26.

For those residents on Lieberman and Poeppel Roads, the views would be new views of a 4-lane expressway where currently the views are agricultural open space. The homes remaining near the South Fort interchange already have a view of an interchange and the new interchange and roadways would be added to it. If that interchange is lit at night, the nighttime views would be impacted by the added light.

7) Discuss mitigation measures to avoid or minimize adverse visual effects or enhance positive aesthetic effects of the project.

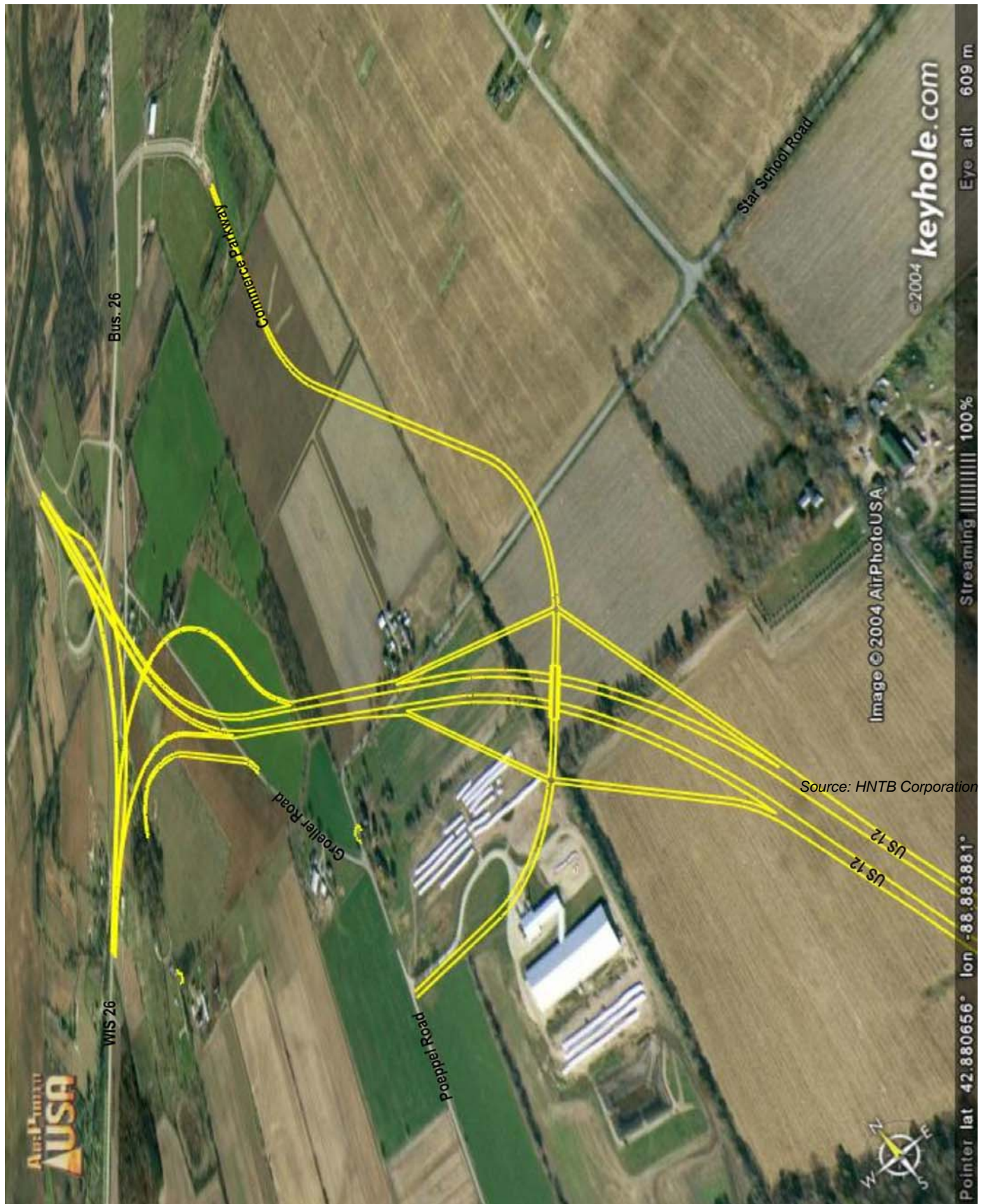
Potential mitigation measures could include minimization of any highway lighting by directing light down onto the facility and not on adjacent properties or perhaps using cut-off light fixtures. Landscaping mounds or something similar could be used in rural areas for the bypass routes to screen adjacent residential uses.

WisDOT has assessed potential impacts during the planning and project development stages, as reflected in this DEIS. If one of the build alternatives is selected, WisDOT should use this data and information in the design, right-of-way acquisition and construction phases of the project. The principles of "context sensitive design" should be

considered and the final design of a project should be in harmony with the community. Attempts should be made to preserve environmental, scenic, aesthetic, historic, and natural resource values of the area in light of efficient and effective use of the resources (time, budget, community) of the involved parties. The project should be designed and built with minimal disruption to the community. Through the public involvement process and environmental review, the landscape, the community, and valued resources should be understood before engineering design is started.



Source: HNTB Corporation



Source: Keyhole.com, AirPhotoUSA, HNTB Corporation